

sdl\_framework

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# Contents

<b>1</b>	<b>sdl_framework</b>	<b>1</b>
<b>2</b>	<b>Bug List</b>	<b>3</b>
<b>3</b>	<b>Hierarchical Index</b>	<b>5</b>
3.1	Class Hierarchy . . . . .	5
<b>4</b>	<b>Class Index</b>	<b>7</b>
4.1	Class List . . . . .	7
<b>5</b>	<b>File Index</b>	<b>9</b>
5.1	File List . . . . .	9
<b>6</b>	<b>Class Documentation</b>	<b>13</b>
6.1	_IpAddress Class Reference . . . . .	13
6.1.1	Detailed Description . . . . .	13
6.1.2	Constructor & Destructor Documentation . . . . .	13
6.1.2.1	_IpAddress() . . . . .	13
6.1.2.2	_IpAddress(UInt16 port) . . . . .	13
6.1.2.3	_IpAddress(std::string host, UInt16 port) . . . . .	14
6.1.3	Member Function Documentation . . . . .	14
6.1.3.1	GetHost() const . . . . .	14
6.1.3.2	GetIpAddress() const . . . . .	14
6.1.3.3	GetPort() const . . . . .	14
6.1.3.4	Ok() const . . . . .	14
6.1.3.5	SetIp(IPAddress sdl_ip) . . . . .	14

6.2	Button Struct Reference . . . . .	14
6.2.1	Detailed Description . . . . .	15
6.2.2	Member Data Documentation . . . . .	15
6.2.2.1	a . . . . .	15
6.2.2.2	angle . . . . .	15
6.2.2.3	b . . . . .	15
6.2.2.4	center . . . . .	15
6.2.2.5	colorID . . . . .	16
6.2.2.6	destRect . . . . .	16
6.2.2.7	fontID . . . . .	16
6.2.2.8	func . . . . .	16
6.2.2.9	g . . . . .	16
6.2.2.10	r . . . . .	16
6.2.2.11	sdlFlip . . . . .	16
6.2.2.12	srcRect . . . . .	16
6.2.2.13	textQuality . . . . .	16
6.2.2.14	textureID . . . . .	16
6.2.2.15	viewportID . . . . .	17
6.2.2.16	x . . . . .	17
6.2.2.17	x1 . . . . .	17
6.2.2.18	x2 . . . . .	17
6.2.2.19	y . . . . .	17
6.2.2.20	y1 . . . . .	17
6.2.2.21	y2 . . . . .	17
6.3	ClientSocket Class Reference . . . . .	17
6.3.1	Detailed Description . . . . .	18
6.3.2	Constructor & Destructor Documentation . . . . .	18
6.3.2.1	ClientSocket() . . . . .	18
6.3.2.2	ClientSocket(std::string host, Uint16 port) . . . . .	18
6.3.3	Member Function Documentation . . . . .	18

6.3.3.1	Connect(_IpAddress &remoteip) . . . . .	18
6.3.3.2	Connect(HostSocket &the_listener_socket) . . . . .	18
6.3.3.3	getIpAddress() const . . . . .	18
6.3.3.4	OnReady() . . . . .	19
6.3.3.5	Receive(NetMessage &rData) . . . . .	19
6.3.3.6	Send(NetMessage &sData) . . . . .	19
6.3.3.7	SetSocket(TCPsocket the_sdl_socket) . . . . .	19
6.4	Game Class Reference . . . . .	19
6.4.1	Detailed Description . . . . .	20
6.4.2	Member Function Documentation . . . . .	20
6.4.2.1	delay() . . . . .	20
6.4.2.2	freeMemory() . . . . .	20
6.4.2.3	getRenderer() const . . . . .	20
6.4.2.4	getWindow() const . . . . .	20
6.4.2.5	handleEvents() . . . . .	21
6.4.2.6	init() . . . . .	21
6.4.2.7	Instance() . . . . .	21
6.4.2.8	isRunning() const . . . . .	21
6.4.2.9	quit() . . . . .	21
6.4.2.10	render() . . . . .	21
6.4.2.11	update() . . . . .	22
6.5	GameObject Class Reference . . . . .	22
6.5.1	Detailed Description . . . . .	23
6.5.2	Constructor & Destructor Documentation . . . . .	23
6.5.2.1	GameObject() . . . . .	23
6.5.2.2	GameObject(Vector2D position, int width, int height, double angle, unsigned r, unsigned g, unsigned b, unsigned a) . . . . .	23
6.5.2.3	~GameObject() . . . . .	23
6.5.3	Member Function Documentation . . . . .	23
6.5.3.1	draw()=0 . . . . .	23
6.5.3.2	getHeight() const . . . . .	23

6.5.3.3	getPosition() const . . . . .	23
6.5.3.4	getWidth() const . . . . .	24
6.5.3.5	update()=0 . . . . .	24
6.5.4	Member Data Documentation . . . . .	24
6.5.4.1	a . . . . .	24
6.5.4.2	angle . . . . .	24
6.5.4.3	b . . . . .	24
6.5.4.4	g . . . . .	24
6.5.4.5	height . . . . .	24
6.5.4.6	position . . . . .	24
6.5.4.7	r . . . . .	25
6.5.4.8	width . . . . .	25
6.6	GameOverState Class Reference . . . . .	25
6.6.1	Detailed Description . . . . .	25
6.6.2	Constructor & Destructor Documentation . . . . .	25
6.6.2.1	GameOverState(GameStateMachine &stateMachine) . . . . .	25
6.6.3	Member Function Documentation . . . . .	26
6.6.3.1	handleEvents() . . . . .	26
6.6.3.2	onEnter(std::string fileName) . . . . .	26
6.6.3.3	onExit() . . . . .	26
6.6.3.4	render() . . . . .	27
6.6.3.5	update() . . . . .	27
6.7	GameState Class Reference . . . . .	27
6.7.1	Detailed Description . . . . .	28
6.7.2	Constructor & Destructor Documentation . . . . .	28
6.7.2.1	GameState(GameStateMachine &stateMachine) . . . . .	28
6.7.3	Member Function Documentation . . . . .	29
6.7.3.1	handleEvents() . . . . .	29
6.7.3.2	onEnter(std::string fileName) . . . . .	29
6.7.3.3	onExit() . . . . .	29

6.7.3.4	render()	30
6.7.3.5	requestStackClear()	30
6.7.3.6	requestStackPop()	30
6.7.3.7	requestStackPush(States stateID)	30
6.7.3.8	update()	30
6.7.4	Member Data Documentation	30
6.7.4.1	assets	30
6.7.4.2	buttonKeys	31
6.7.4.3	color	31
6.7.4.4	colorKeys	31
6.7.4.5	functionMap	31
6.7.4.6	gameObjects	31
6.7.4.7	musicKeys	31
6.7.4.8	name	31
6.7.4.9	screenSize	31
6.7.4.10	soundKeys	32
6.7.4.11	stateJson	32
6.7.4.12	text	32
6.7.4.13	textAssets	32
6.7.4.14	ttf	32
6.7.4.15	ttfKeys	32
6.7.4.16	viewports	32
6.8	GameStateMachine Class Reference	33
6.8.1	Detailed Description	33
6.8.2	Constructor & Destructor Documentation	33
6.8.2.1	GameStateMachine()	33
6.8.3	Member Function Documentation	33
6.8.3.1	clearStates()	33
6.8.3.2	handleEvents()	34
6.8.3.3	isEmpty() const	34

6.8.3.4	popState()	34
6.8.3.5	pushState(States stateID)	34
6.8.3.6	registerState(States stateID)	34
6.8.3.7	render()	34
6.8.3.8	update()	35
6.9	GFXAsset Struct Reference	35
6.9.1	Detailed Description	35
6.10	HostSocket Class Reference	35
6.10.1	Detailed Description	35
6.10.2	Constructor & Destructor Documentation	36
6.10.2.1	HostSocket(_IpAddress &the_ip_address)	36
6.10.2.2	HostSocket(UInt16 port)	36
6.10.3	Member Function Documentation	36
6.10.3.1	Accept(ClientSocket &)	36
6.10.3.2	OnReady()	36
6.11	ImageAsset Struct Reference	36
6.11.1	Detailed Description	37
6.11.2	Member Data Documentation	37
6.11.2.1	angle	37
6.11.2.2	center	37
6.11.2.3	destRect	37
6.11.2.4	fileName	37
6.11.2.5	sdlFlip	37
6.11.2.6	srcRect	37
6.11.2.7	textureID	37
6.11.2.8	viewportID	37
6.12	InputManager Class Reference	38
6.12.1	Detailed Description	38
6.12.2	Member Function Documentation	38
6.12.2.1	getAxisX(int joy, int stick) const	38



6.12.2.2	getAxisY(int joy, int stick) const . . . . .	39
6.12.2.3	getButtonState(int joy, int buttonNumber) const . . . . .	39
6.12.2.4	getMouseButtonState(mouse_buttons mouseButton) const . . . . .	39
6.12.2.5	getMousePosition() const . . . . .	39
6.12.2.6	initializeJoysticks() . . . . .	39
6.12.2.7	Instance() . . . . .	39
6.12.2.8	isKeyPressed(const SDL_Scancode keycode) const . . . . .	39
6.12.2.9	isKeyReleased(const SDL_Scancode keyCode) const . . . . .	40
6.12.2.10	isKeyTriggered(const SDL_Scancode keyCode) . . . . .	40
6.12.2.11	joysticksInitialised() const . . . . .	40
6.12.2.12	reset() . . . . .	40
6.12.2.13	update() . . . . .	40
6.13	Logfile Class Reference . . . . .	40
6.13.1	Detailed Description . . . . .	41
6.13.2	Member Function Documentation . . . . .	41
6.13.2.1	createLogfile(std::string filename) . . . . .	41
6.13.2.2	Instance() . . . . .	41
6.13.2.3	quitLogging() . . . . .	41
6.13.2.4	Textout(std::string category, std::string key, std::string value) . . . . .	42
6.14	MenuButton Class Reference . . . . .	42
6.14.1	Detailed Description . . . . .	43
6.14.2	Constructor & Destructor Documentation . . . . .	43
6.14.2.1	MenuButton() . . . . .	43
6.14.2.2	MenuButton(Button values) . . . . .	43
6.14.2.3	~MenuButton() . . . . .	43
6.14.3	Member Function Documentation . . . . .	43
6.14.3.1	draw() . . . . .	43
6.14.3.2	update() . . . . .	44
6.15	MenuState Class Reference . . . . .	44
6.15.1	Detailed Description . . . . .	44

6.15.2	Constructor & Destructor Documentation . . . . .	44
6.15.2.1	MenuState(GameStateMachine &stateMachine) . . . . .	44
6.15.3	Member Function Documentation . . . . .	45
6.15.3.1	handleEvents() . . . . .	45
6.15.3.2	onEnter(std::string fileName) . . . . .	45
6.15.3.3	onExit() . . . . .	45
6.15.3.4	render() . . . . .	46
6.15.3.5	update() . . . . .	46
6.16	Net Class Reference . . . . .	46
6.16.1	Detailed Description . . . . .	46
6.16.2	Member Function Documentation . . . . .	46
6.16.2.1	Init() . . . . .	46
6.16.2.2	Quit() . . . . .	47
6.17	NetMessage Class Reference . . . . .	47
6.17.1	Detailed Description . . . . .	47
6.17.2	Member Enumeration Documentation . . . . .	48
6.17.2.1	bufstates . . . . .	48
6.17.3	Constructor & Destructor Documentation . . . . .	48
6.17.3.1	NetMessage() . . . . .	48
6.17.4	Member Function Documentation . . . . .	48
6.17.4.1	finish() . . . . .	48
6.17.4.2	LoadBytes(charbuf &inputbuffer, int n) . . . . .	48
6.17.4.3	NumToLoad() . . . . .	48
6.17.4.4	NumToUnLoad() . . . . .	48
6.17.4.5	reset() . . . . .	48
6.17.4.6	UnLoadBytes(charbuf &destbuffer) . . . . .	49
6.17.5	Member Data Documentation . . . . .	49
6.17.5.1	buffer . . . . .	49
6.17.5.2	state . . . . .	49
6.18	PauseState Class Reference . . . . .	49

6.18.1 Detailed Description . . . . .	49
6.18.2 Constructor & Destructor Documentation . . . . .	49
6.18.2.1 PauseState(GameStateMachine &stateMachine) . . . . .	49
6.18.3 Member Function Documentation . . . . .	50
6.18.3.1 handleEvents() . . . . .	50
6.18.3.2 onEnter(std::string fileName) . . . . .	50
6.18.3.3 onExit() . . . . .	50
6.18.3.4 render() . . . . .	51
6.18.3.5 update() . . . . .	51
6.19 PlayState Class Reference . . . . .	51
6.19.1 Detailed Description . . . . .	51
6.19.2 Constructor & Destructor Documentation . . . . .	51
6.19.2.1 PlayState(GameStateMachine &stateMachine) . . . . .	51
6.19.3 Member Function Documentation . . . . .	52
6.19.3.1 handleEvents() . . . . .	52
6.19.3.2 onEnter(std::string fileName) . . . . .	52
6.19.3.3 onExit() . . . . .	52
6.19.3.4 render() . . . . .	53
6.19.3.5 update() . . . . .	53
6.20 SettingState Class Reference . . . . .	53
6.20.1 Detailed Description . . . . .	53
6.20.2 Constructor & Destructor Documentation . . . . .	53
6.20.2.1 SettingState(GameStateMachine &stateMachine) . . . . .	53
6.20.3 Member Function Documentation . . . . .	54
6.20.3.1 handleEvents() . . . . .	54
6.20.3.2 onEnter(std::string fileName) . . . . .	54
6.20.3.3 onExit() . . . . .	54
6.20.3.4 render() . . . . .	55
6.20.3.5 update() . . . . .	55
6.21 SoundManager Class Reference . . . . .	55

6.21.1 Detailed Description . . . . .	56
6.21.2 Member Function Documentation . . . . .	56
6.21.2.1 freeMemory() . . . . .	56
6.21.2.2 haltMusic() . . . . .	56
6.21.2.3 init(int flags, unsigned freq, Uint16 format, unsigned channels, unsigned chunksize) . . . . .	56
6.21.2.4 Instance() . . . . .	57
6.21.2.5 isMusicPaused() . . . . .	57
6.21.2.6 isMusicPlaying() . . . . .	57
6.21.2.7 load(std::string fileName, std::string soundID, SoundType soundType) . . . . .	57
6.21.2.8 pauseMusic() . . . . .	57
6.21.2.9 playMusic(std::string musicID, int loop) . . . . .	58
6.21.2.10 playSound(std::string soundID, int loop) . . . . .	58
6.21.2.11 removeMusic(std::string musicID) . . . . .	58
6.21.2.12 removeSFX(std::string sfxID) . . . . .	58
6.21.2.13 resumeMusic() . . . . .	59
6.22 SystemTime Class Reference . . . . .	59
6.22.1 Detailed Description . . . . .	59
6.22.2 Member Function Documentation . . . . .	60
6.22.2.1 endTimer() . . . . .	60
6.22.2.2 getASCTime() . . . . .	60
6.22.2.3 getDate() . . . . .	60
6.22.2.4 getDateTime() . . . . .	60
6.22.2.5 getTime() . . . . .	60
6.22.2.6 getTimerValue() . . . . .	61
6.22.2.7 Instance() . . . . .	61
6.22.2.8 startTimer() . . . . .	61
6.23 TcpSocket Class Reference . . . . .	61
6.23.1 Detailed Description . . . . .	62
6.23.2 Constructor & Destructor Documentation . . . . .	62
6.23.2.1 TcpSocket() . . . . .	62

6.23.2.2	~TcpSocket()	62
6.23.3	Member Function Documentation	62
6.23.3.1	Ok() const	62
6.23.3.2	OnReady()	62
6.23.3.3	Ready() const	62
6.23.3.4	SetSocket(TCPsocket the_sdl_socket)	62
6.23.4	Member Data Documentation	63
6.23.4.1	m_Socket	63
6.23.4.2	set	63
6.24	TextAsset Struct Reference	63
6.24.1	Detailed Description	63
6.24.2	Member Data Documentation	63
6.24.2.1	angle	63
6.24.2.2	center	64
6.24.2.3	colorID	64
6.24.2.4	destRect	64
6.24.2.5	fontName	64
6.24.2.6	sdlFlip	64
6.24.2.7	srcRect	64
6.24.2.8	text	64
6.24.2.9	textQuality	64
6.24.2.10	textureID	64
6.24.2.11	viewportID	64
6.25	Texture Class Reference	65
6.25.1	Detailed Description	65
6.25.2	Constructor & Destructor Documentation	65
6.25.2.1	Texture()	65
6.25.2.2	~Texture()	65
6.25.3	Member Function Documentation	66
6.25.3.1	free()	66

6.25.3.2	getHeight() const . . . . .	66
6.25.3.3	getWidth() const . . . . .	66
6.25.3.4	loadFromFile(std::string path, bool colorKeying=false, SDL_Color colorKey={0, 255, 255, 255}) . . . . .	66
6.25.3.5	loadFromRenderedText(TTF_Font *font, std::string text, SDL_Color textColor, TextQuality textQuality=TextQuality::SOLID) . . . . .	66
6.25.3.6	render(int x, int y, SDL_Rect *clip=nullptr, SDL_Rect viewport={0}, double angle=0.d, SDL_Point *center=nullptr, SDL_RendererFlip flip=SDL_FLIP_NONE) . . . . .	67
6.25.3.7	setAlpha(Uint8 alpha) . . . . .	67
6.25.3.8	setBlendMode(SDL_BlendMode blending) . . . . .	67
6.25.3.9	setColor(SDL_Color color) . . . . .	67
6.26	TextureManager Class Reference . . . . .	68
6.26.1	Detailed Description . . . . .	69
6.26.2	Member Function Documentation . . . . .	69
6.26.2.1	addViewport(int x, int y, int w, int h, std::string keyOfViewport) . . . . .	69
6.26.2.2	addViewport(SDL_Rect &viewport, std::string keyOfViewport) . . . . .	69
6.26.2.3	drawBox(std::string viewportID, int x1, int x2, int y1, int y2, Uint8 r, Uint8 g, Uint8 b, Uint8 a) . . . . .	70
6.26.2.4	drawCircle(std::string viewportID, int x, int y, int radius, Uint8 r, Uint8 g, Uint8 b, Uint8 a) . . . . .	70
6.26.2.5	drawEllipse(std::string viewportID, int x, int y, int rx, int ry, Uint8 r, Uint8 g, Uint8 b, Uint8 a) . . . . .	70
6.26.2.6	drawTexture(std::string textureID, int x, int y, SDL_Rect *clip=nullptr, std::string viewportID=""screen"", double angle=0, SDL_Point *center=nullptr, SDL_RendererFlip flip=SDL_FLIP_NONE) . . . . .	71
6.26.2.7	freeMemory() . . . . .	71
6.26.2.8	getHeightOfTexture(std::string textureID) . . . . .	71
6.26.2.9	getViewport(std::string viewportID) . . . . .	72
6.26.2.10	getWidthOfTexture(std::string textureID) . . . . .	72
6.26.2.11	hasTexture(std::string textureID) . . . . .	72
6.26.2.12	initTextureManager(int imgFlags) . . . . .	72
6.26.2.13	Instance() . . . . .	72
6.26.2.14	loadColor(std::string id, Uint8 r, Uint8 g, Uint8 b, Uint8 a) . . . . .	73

6.26.2.15 loadFont(std::string file, int pointSize, std::string id) . . . . .	73
6.26.2.16 loadImageTexture(std::string path, std::string textureID, bool colorKeying=false, std::string colorKey=""cyan"") . . . . .	73
6.26.2.17 loadTextTexture(std::string fontID, std::string text, std::string colorID, std::string textureID, TextQuality textQuality=TextQuality::SOLID) . . . . .	73
6.26.2.18 removeColor(std::string id) . . . . .	74
6.26.2.19 removeFont(std::string id) . . . . .	74
6.26.2.20 removeTexture(std::string id) . . . . .	74
6.26.2.21 removeViewport(std::string id) . . . . .	74
6.26.2.22 setAlphaOfTexture(std::string textureID, Uint8 alpha) . . . . .	75
6.26.2.23 setBlendModeOfTexture(std::string textureID, SDL_BlendMode blending) . . . . .	75
6.26.2.24 setColorOfTexture(std::string textureID, std::string colorID) . . . . .	75
6.27 Timer Class Reference . . . . .	75
6.27.1 Detailed Description . . . . .	76
6.27.2 Constructor & Destructor Documentation . . . . .	76
6.27.2.1 Timer() . . . . .	76
6.27.3 Member Function Documentation . . . . .	76
6.27.3.1 getTicks() . . . . .	76
6.27.3.2 isPaused() const . . . . .	77
6.27.3.3 isStarted() const . . . . .	77
6.27.3.4 pause() . . . . .	77
6.27.3.5 start() . . . . .	77
6.27.3.6 stop() . . . . .	77
6.27.3.7 unpause() . . . . .	77
6.28 Vector2D Class Reference . . . . .	78
6.28.1 Detailed Description . . . . .	78
6.28.2 Constructor & Destructor Documentation . . . . .	78
6.28.2.1 Vector2D() . . . . .	78
6.28.2.2 Vector2D(float x, float y) . . . . .	78
6.28.2.3 ~Vector2D() . . . . .	79
6.28.3 Member Function Documentation . . . . .	79

6.28.3.1	calcLength() const . . . . .	79
6.28.3.2	getXPos() const . . . . .	79
6.28.3.3	getYPos() const . . . . .	79
6.28.3.4	setXPos(float newXPos) . . . . .	79
6.28.3.5	setYPos(float newYPos) . . . . .	80
6.29	Viewport Struct Reference . . . . .	80
6.29.1	Detailed Description . . . . .	80
6.29.2	Member Data Documentation . . . . .	80
6.29.2.1	alignment . . . . .	80
6.29.2.2	percentageX . . . . .	81
6.29.2.3	percentageY . . . . .	81
6.29.2.4	textureID . . . . .	81
6.29.2.5	viewport . . . . .	81
6.29.2.6	viewportID . . . . .	81
<b>7</b>	<b>File Documentation</b>	<b>83</b>
7.1	header/Asset.hpp File Reference . . . . .	83
7.2	header/CommonEnums.hpp File Reference . . . . .	83
7.2.1	Detailed Description . . . . .	84
7.2.2	Enumeration Type Documentation . . . . .	84
7.2.2.1	FLIP . . . . .	84
7.2.2.2	StateAction . . . . .	84
7.2.2.3	States . . . . .	84
7.2.2.4	TEXTQUALITY . . . . .	85
7.3	header/Game.hpp File Reference . . . . .	85
7.3.1	Detailed Description . . . . .	85
7.4	header/GameObject.hpp File Reference . . . . .	85
7.4.1	Detailed Description . . . . .	86
7.5	header/GameOverState.hpp File Reference . . . . .	86
7.5.1	Detailed Description . . . . .	86
7.6	header/GameState.hpp File Reference . . . . .	86



7.6.1 Detailed Description . . . . .	86
7.7 header/GameStateMachine.hpp File Reference . . . . .	87
7.7.1 Detailed Description . . . . .	87
7.8 header/InputManager.hpp File Reference . . . . .	87
7.8.1 Detailed Description . . . . .	87
7.8.2 Enumeration Type Documentation . . . . .	88
7.8.2.1 mouse_buttons . . . . .	88
7.9 header/Logfile.hpp File Reference . . . . .	88
7.10 header/MenuButton.hpp File Reference . . . . .	88
7.10.1 Detailed Description . . . . .	88
7.11 header/MenuState.hpp File Reference . . . . .	89
7.11.1 Detailed Description . . . . .	89
7.12 header/Net.hpp File Reference . . . . .	89
7.12.1 Typedef Documentation . . . . .	89
7.12.1.1 charbuf . . . . .	89
7.13 header/PauseState.hpp File Reference . . . . .	90
7.13.1 Detailed Description . . . . .	90
7.14 header/PlayState.hpp File Reference . . . . .	90
7.14.1 Detailed Description . . . . .	90
7.15 header/SettingState.hpp File Reference . . . . .	90
7.15.1 Detailed Description . . . . .	90
7.16 header/SoundManager.hpp File Reference . . . . .	91
7.16.1 Detailed Description . . . . .	91
7.16.2 Enumeration Type Documentation . . . . .	91
7.16.2.1 SoundType . . . . .	91
7.17 header/SystemTime.hpp File Reference . . . . .	91
7.17.1 Detailed Description . . . . .	92
7.18 header/Texture.hpp File Reference . . . . .	92
7.18.1 Detailed Description . . . . .	92
7.18.2 Enumeration Type Documentation . . . . .	92

7.18.2.1	TextQuality . . . . .	92
7.19	header/TextureManager.hpp File Reference . . . . .	92
7.19.1	Detailed Description . . . . .	93
7.20	header/Timer.hpp File Reference . . . . .	93
7.20.1	Detailed Description . . . . .	93
7.21	header/Vector2D.hpp File Reference . . . . .	93
7.21.1	Detailed Description . . . . .	93
7.22	header/Viewport.hpp File Reference . . . . .	93
7.22.1	Detailed Description . . . . .	94
7.23	html/dynsections.js File Reference . . . . .	94
7.23.1	Function Documentation . . . . .	94
7.23.1.1	toggleFolder(id) . . . . .	94
7.23.1.2	toggleInherit(id) . . . . .	94
7.23.1.3	toggleLevel(level) . . . . .	94
7.23.1.4	toggleVisibility(linkObj) . . . . .	94
7.23.1.5	updateStripes() . . . . .	95
7.24	html/jquery.js File Reference . . . . .	95
7.24.1	Function Documentation . . . . .	96
7.24.1.1	b(function(){if(!b.support.reliableMarginRight){b.cssHooks.marginRight={get↵ :function(bw, bv){var e;b.swap(bw,{display:"inline-block"}, function(){if(bv){e=↵ Z(bw,"margin-right","marginRight")}}else{e=bw.style.marginRight}};return e}})}↵	96
7.24.1.2	each(["height","width"], function(bv, e){b.cssHooks[e]={get:function(by, bx,↵ bw){var bz;if(bx){if(by.offsetWidth!==0){return p(by, e, bw)}else{b.swap(by,↵ a7, function(){bz=p(by, e, bw)}}}return bz}}, set:function(bw, bx){if(bc.↵ test(bx)){bx=parseFloat(bx);if(bx >=0){return bx+"px"}}else{return bx}}}) . . .	96
7.24.1.3	extend({cssHooks:{opacity:{get:function(bw, bv){if(bv){var e=Z(bw,"opacity","opacity");return↵ e===""?"1":e}else{return bw.style.opacity}}}, cssNumber:{fillOpacity:true,↵ fontWeight:true, lineHeight:true, opacity:true, orphans:true, widows:true, zIndex↵ :true, zoom:true}, cssProps:{float:"b.support.cssFloat?"cssFloat":"style↵ Float"}, style:function(bx, bw, bD, by){if(!bx    bx.nodeType===3    bx.↵ nodeType===8    !bx.style){return}var bB, bC, bz=b.camelCase(bw),↵ bv=bx.style, bE=b.cssHooks[bz];bw=b.cssProps[bz]    bz;if(bD!==L){b↵ C=typeof bD;if(bC===string"&&(bB=l.exec(bD))){bD=(+(bB[1]+1)*bB[2])+parse↵ Float(b.css(bx, bw));bC="number"}if(bD===null    bC===number"&&isNa↵ N(bD)){return}if(bC===number"&&!b.cssNumber[bz]){bD+="px"}if(!bE    !(("set"↵ bE)    (bD=bE.set(bx, bD))!==L){try{bv[bw]=bD}catch(bA){}}else{if(b↵ E &&"get" in bE &&(bB=bE.get(bx, false, by))!==L){return bB}return bv[bw]}},↵ css:function(by, bx, bv){var bw, e;bx=b.camelCase(bx);e=b.cssHooks[bx];bx=b.↵ cssProps[bx]    bx;if(bx===cssFloat){bx="float"}if(e &&"get" in e↵ &&(bw=e.get(by, true, bv))!==L){return bw}else{if(Z){return Z(by, bx)}},↵ swap:function(bx, bw, by){var e={};for(var bv in bw){e[bv]=bx.style[bv];bx.↵ style[bv]=bw[bv]}by.call(bx);for(bv in bw){bx.style[bv]=e[bv]}}} . . . . .	96

7.24.1.4	if(av.documentElement.currentStyle)	96
7.24.1.5	if(av.defaultView &&av.defaultView.getComputedStyle)	96
7.24.1.6	if(b.expr &&b.expr.filters)	96
7.24.1.7	if(!b.support.opacity)	96
7.24.1.8	p(by, bw, bv)	96
7.24.2	Variable Documentation	96
7.24.2.1	aD	96
7.24.2.2	aM	97
7.24.2.3	ap	97
7.24.2.4	aQ	97
7.24.2.5	au	97
7.24.2.6	aZ	97
7.24.2.7	b	97
7.24.2.8	bb	105
7.24.2.9	bq	105
7.24.2.10	bs	106
7.24.2.11	c	106
7.24.2.12	css	106
7.24.2.13	curCSS	106
7.24.2.14	k	106
7.24.2.15	L	106
7.24.2.16	Z	106
7.25	html/search/all_0.js File Reference	106
7.25.1	Variable Documentation	107
7.25.1.1	searchData	107
7.26	html/search/all_1.js File Reference	107
7.26.1	Variable Documentation	107
7.26.1.1	searchData	107
7.27	html/search/all_10.js File Reference	107
7.27.1	Variable Documentation	108

7.27.1.1	hpp . . . . .	108
7.27.1.2	searchData . . . . .	108
7.28	html/search/all_11.js File Reference . . . . .	108
7.28.1	Variable Documentation . . . . .	108
7.28.1.1	searchData . . . . .	108
7.29	html/search/all_12.js File Reference . . . . .	108
7.29.1	Variable Documentation . . . . .	109
7.29.1.1	searchData . . . . .	109
7.30	html/search/all_13.js File Reference . . . . .	109
7.30.1	Variable Documentation . . . . .	110
7.30.1.1	js . . . . .	110
7.30.1.2	searchData . . . . .	110
7.31	html/search/all_14.js File Reference . . . . .	110
7.31.1	Variable Documentation . . . . .	110
7.31.1.1	searchData . . . . .	110
7.32	html/search/all_15.js File Reference . . . . .	110
7.32.1	Variable Documentation . . . . .	111
7.32.1.1	searchData . . . . .	111
7.33	html/search/all_16.js File Reference . . . . .	111
7.33.1	Variable Documentation . . . . .	111
7.33.1.1	searchData . . . . .	111
7.34	html/search/all_17.js File Reference . . . . .	111
7.34.1	Variable Documentation . . . . .	111
7.34.1.1	searchData . . . . .	111
7.35	html/search/all_18.js File Reference . . . . .	112
7.35.1	Variable Documentation . . . . .	112
7.35.1.1	searchData . . . . .	112
7.36	html/search/all_19.js File Reference . . . . .	112
7.36.1	Variable Documentation . . . . .	112
7.36.1.1	searchData . . . . .	112

7.37	html/search/all_1a.js File Reference . . . . .	112
7.37.1	Variable Documentation . . . . .	113
7.37.1.1	searchData . . . . .	113
7.38	html/search/all_1b.js File Reference . . . . .	113
7.38.1	Variable Documentation . . . . .	113
7.38.1.1	searchData . . . . .	113
7.39	html/search/all_2.js File Reference . . . . .	113
7.39.1	Variable Documentation . . . . .	113
7.39.1.1	js . . . . .	113
7.39.1.2	searchData . . . . .	114
7.40	html/search/all_3.js File Reference . . . . .	114
7.40.1	Variable Documentation . . . . .	114
7.40.1.1	searchData . . . . .	114
7.41	html/search/all_4.js File Reference . . . . .	114
7.41.1	Variable Documentation . . . . .	114
7.41.1.1	searchData . . . . .	114
7.42	html/search/all_5.js File Reference . . . . .	115
7.42.1	Variable Documentation . . . . .	115
7.42.1.1	searchData . . . . .	115
7.43	html/search/all_6.js File Reference . . . . .	115
7.43.1	Variable Documentation . . . . .	115
7.43.1.1	searchData . . . . .	115
7.44	html/search/all_7.js File Reference . . . . .	116
7.44.1	Variable Documentation . . . . .	116
7.44.1.1	js . . . . .	116
7.44.1.2	searchData . . . . .	116
7.45	html/search/all_8.js File Reference . . . . .	116
7.45.1	Variable Documentation . . . . .	116
7.45.1.1	js . . . . .	116
7.45.1.2	searchData . . . . .	116

7.46	html/search/all_9.js File Reference . . . . .	117
7.46.1	Variable Documentation . . . . .	117
7.46.1.1	js . . . . .	117
7.46.1.2	searchData . . . . .	117
7.47	html/search/all_a.js File Reference . . . . .	117
7.47.1	Variable Documentation . . . . .	117
7.47.1.1	searchData . . . . .	117
7.48	html/search/all_b.js File Reference . . . . .	118
7.48.1	Variable Documentation . . . . .	118
7.48.1.1	searchData . . . . .	118
7.49	html/search/all_c.js File Reference . . . . .	118
7.49.1	Variable Documentation . . . . .	118
7.49.1.1	searchData . . . . .	118
7.50	html/search/all_d.js File Reference . . . . .	119
7.50.1	Variable Documentation . . . . .	119
7.50.1.1	searchData . . . . .	119
7.51	html/search/all_e.js File Reference . . . . .	119
7.51.1	Variable Documentation . . . . .	119
7.51.1.1	js . . . . .	119
7.51.1.2	searchData . . . . .	119
7.52	html/search/all_f.js File Reference . . . . .	120
7.52.1	Variable Documentation . . . . .	120
7.52.1.1	searchData . . . . .	120
7.53	html/search/classes_0.js File Reference . . . . .	120
7.53.1	Variable Documentation . . . . .	120
7.53.1.1	searchData . . . . .	120
7.54	html/search/classes_1.js File Reference . . . . .	121
7.54.1	Variable Documentation . . . . .	121
7.54.1.1	searchData . . . . .	121
7.55	html/search/classes_2.js File Reference . . . . .	121

7.55.1	Variable Documentation . . . . .	121
7.55.1.1	searchData . . . . .	121
7.56	html/search/classes_3.js File Reference . . . . .	121
7.56.1	Variable Documentation . . . . .	122
7.56.1.1	searchData . . . . .	122
7.57	html/search/classes_4.js File Reference . . . . .	122
7.57.1	Variable Documentation . . . . .	122
7.57.1.1	searchData . . . . .	122
7.58	html/search/classes_5.js File Reference . . . . .	122
7.58.1	Variable Documentation . . . . .	123
7.58.1.1	searchData . . . . .	123
7.59	html/search/classes_6.js File Reference . . . . .	123
7.59.1	Variable Documentation . . . . .	123
7.59.1.1	searchData . . . . .	123
7.60	html/search/classes_7.js File Reference . . . . .	123
7.60.1	Variable Documentation . . . . .	123
7.60.1.1	searchData . . . . .	123
7.61	html/search/classes_8.js File Reference . . . . .	124
7.61.1	Variable Documentation . . . . .	124
7.61.1.1	searchData . . . . .	124
7.62	html/search/classes_9.js File Reference . . . . .	124
7.62.1	Variable Documentation . . . . .	124
7.62.1.1	searchData . . . . .	124
7.63	html/search/classes_a.js File Reference . . . . .	124
7.63.1	Variable Documentation . . . . .	125
7.63.1.1	searchData . . . . .	125
7.64	html/search/classes_b.js File Reference . . . . .	125
7.64.1	Variable Documentation . . . . .	125
7.64.1.1	searchData . . . . .	125
7.65	html/search/classes_c.js File Reference . . . . .	125

7.65.1	Variable Documentation . . . . .	126
7.65.1.1	searchData . . . . .	126
7.66	html/search/enums_0.js File Reference . . . . .	126
7.66.1	Variable Documentation . . . . .	126
7.66.1.1	searchData . . . . .	126
7.67	html/search/enums_1.js File Reference . . . . .	126
7.67.1	Variable Documentation . . . . .	126
7.67.1.1	searchData . . . . .	126
7.68	html/search/enums_2.js File Reference . . . . .	127
7.68.1	Variable Documentation . . . . .	127
7.68.1.1	searchData . . . . .	127
7.69	html/search/enums_3.js File Reference . . . . .	127
7.69.1	Variable Documentation . . . . .	127
7.69.1.1	searchData . . . . .	127
7.70	html/search/enums_4.js File Reference . . . . .	127
7.70.1	Variable Documentation . . . . .	128
7.70.1.1	hpp . . . . .	128
7.70.1.2	searchData . . . . .	128
7.71	html/search/enumvalues_0.js File Reference . . . . .	128
7.71.1	Variable Documentation . . . . .	128
7.71.1.1	hpp . . . . .	128
7.71.1.2	searchData . . . . .	128
7.72	html/search/enumvalues_1.js File Reference . . . . .	128
7.72.1	Variable Documentation . . . . .	129
7.72.1.1	searchData . . . . .	129
7.73	html/search/enumvalues_2.js File Reference . . . . .	129
7.73.1	Variable Documentation . . . . .	129
7.73.1.1	searchData . . . . .	129
7.74	html/search/enumvalues_3.js File Reference . . . . .	129
7.74.1	Variable Documentation . . . . .	129



7.74.1.1	searchData . . . . .	129
7.75	html/search/enumvalues_4.js File Reference . . . . .	130
7.75.1	Variable Documentation . . . . .	130
7.75.1.1	searchData . . . . .	130
7.76	html/search/enumvalues_5.js File Reference . . . . .	130
7.76.1	Variable Documentation . . . . .	130
7.76.1.1	searchData . . . . .	130
7.77	html/search/enumvalues_6.js File Reference . . . . .	130
7.77.1	Variable Documentation . . . . .	131
7.77.1.1	searchData . . . . .	131
7.78	html/search/enumvalues_7.js File Reference . . . . .	131
7.78.1	Variable Documentation . . . . .	131
7.78.1.1	hpp . . . . .	131
7.78.1.2	searchData . . . . .	131
7.79	html/search/enumvalues_8.js File Reference . . . . .	131
7.79.1	Variable Documentation . . . . .	132
7.79.1.1	searchData . . . . .	132
7.80	html/search/enumvalues_9.js File Reference . . . . .	132
7.80.1	Variable Documentation . . . . .	132
7.80.1.1	searchData . . . . .	132
7.81	html/search/enumvalues_a.js File Reference . . . . .	132
7.81.1	Variable Documentation . . . . .	132
7.81.1.1	hpp . . . . .	132
7.81.1.2	searchData . . . . .	133
7.82	html/search/enumvalues_b.js File Reference . . . . .	133
7.82.1	Variable Documentation . . . . .	133
7.82.1.1	searchData . . . . .	133
7.83	html/search/files_0.js File Reference . . . . .	133
7.83.1	Variable Documentation . . . . .	133
7.83.1.1	searchData . . . . .	133

7.84	html/search/files_1.js File Reference	134
7.84.1	Variable Documentation	134
7.84.1.1	searchData	134
7.85	html/search/files_10.js File Reference	134
7.85.1	Variable Documentation	134
7.85.1.1	searchData	134
7.86	html/search/files_11.js File Reference	134
7.86.1	Variable Documentation	135
7.86.1.1	searchData	135
7.87	html/search/files_2.js File Reference	135
7.87.1	Variable Documentation	135
7.87.1.1	searchData	135
7.88	html/search/files_3.js File Reference	135
7.88.1	Variable Documentation	136
7.88.1.1	searchData	136
7.89	html/search/files_4.js File Reference	136
7.89.1	Variable Documentation	136
7.89.1.1	searchData	136
7.90	html/search/files_5.js File Reference	136
7.90.1	Variable Documentation	137
7.90.1.1	searchData	137
7.91	html/search/files_6.js File Reference	137
7.91.1	Variable Documentation	137
7.91.1.1	searchData	137
7.92	html/search/files_7.js File Reference	137
7.92.1	Variable Documentation	137
7.92.1.1	searchData	137
7.93	html/search/files_8.js File Reference	138
7.93.1	Variable Documentation	138
7.93.1.1	searchData	138

7.94	html/search/files_9.js File Reference . . . . .	138
7.94.1	Variable Documentation . . . . .	138
7.94.1.1	searchData . . . . .	138
7.95	html/search/files_a.js File Reference . . . . .	138
7.95.1	Variable Documentation . . . . .	139
7.95.1.1	searchData . . . . .	139
7.96	html/search/files_b.js File Reference . . . . .	139
7.96.1	Variable Documentation . . . . .	139
7.96.1.1	searchData . . . . .	139
7.97	html/search/files_c.js File Reference . . . . .	139
7.97.1	Variable Documentation . . . . .	140
7.97.1.1	searchData . . . . .	140
7.98	html/search/files_d.js File Reference . . . . .	140
7.98.1	Variable Documentation . . . . .	140
7.98.1.1	searchData . . . . .	140
7.99	html/search/files_e.js File Reference . . . . .	140
7.99.1	Variable Documentation . . . . .	141
7.99.1.1	searchData . . . . .	141
7.100	html/search/files_f.js File Reference . . . . .	141
7.100.1	Variable Documentation . . . . .	141
7.100.1.1	searchData . . . . .	141
7.101	html/search/functions_0.js File Reference . . . . .	141
7.101.1	Variable Documentation . . . . .	142
7.101.1.1	searchData . . . . .	142
7.102	html/search/functions_1.js File Reference . . . . .	142
7.102.1	Variable Documentation . . . . .	142
7.102.1.1	searchData . . . . .	142
7.103	html/search/functions_10.js File Reference . . . . .	142
7.103.1	Variable Documentation . . . . .	143
7.103.1.1	searchData . . . . .	143

7.104html/search/functions_11.js File Reference . . . . .	143
7.104.1 Variable Documentation . . . . .	143
7.104.1.1 searchData . . . . .	143
7.105html/search/functions_12.js File Reference . . . . .	144
7.105.1 Variable Documentation . . . . .	144
7.105.1.1 searchData . . . . .	144
7.106html/search/functions_13.js File Reference . . . . .	144
7.106.1 Variable Documentation . . . . .	145
7.106.1.1 searchData . . . . .	145
7.107html/search/functions_14.js File Reference . . . . .	145
7.107.1 Variable Documentation . . . . .	145
7.107.1.1 searchData . . . . .	145
7.108html/search/functions_15.js File Reference . . . . .	146
7.108.1 Variable Documentation . . . . .	146
7.108.1.1 searchData . . . . .	146
7.109html/search/functions_16.js File Reference . . . . .	146
7.109.1 Variable Documentation . . . . .	146
7.109.1.1 searchData . . . . .	146
7.110html/search/functions_17.js File Reference . . . . .	146
7.110.1 Variable Documentation . . . . .	147
7.110.1.1 searchData . . . . .	147
7.111html/search/functions_2.js File Reference . . . . .	147
7.111.1 Variable Documentation . . . . .	147
7.111.1.1 searchData . . . . .	147
7.112html/search/functions_3.js File Reference . . . . .	147
7.112.1 Variable Documentation . . . . .	148
7.112.1.1 searchData . . . . .	148
7.113html/search/functions_4.js File Reference . . . . .	148
7.113.1 Variable Documentation . . . . .	148
7.113.1.1 searchData . . . . .	148

7.114html/search/functions_5.js File Reference . . . . .	149
7.114.1 Variable Documentation . . . . .	149
7.114.1.1 searchData . . . . .	149
7.115html/search/functions_6.js File Reference . . . . .	149
7.115.1 Variable Documentation . . . . .	149
7.115.1.1 searchData . . . . .	149
7.116html/search/functions_7.js File Reference . . . . .	149
7.116.1 Variable Documentation . . . . .	150
7.116.1.1 js . . . . .	150
7.116.1.2 searchData . . . . .	150
7.117html/search/functions_8.js File Reference . . . . .	150
7.117.1 Variable Documentation . . . . .	150
7.117.1.1 searchData . . . . .	150
7.118html/search/functions_9.js File Reference . . . . .	150
7.118.1 Variable Documentation . . . . .	151
7.118.1.1 js . . . . .	151
7.118.1.2 searchData . . . . .	151
7.119html/search/functions_a.js File Reference . . . . .	151
7.119.1 Variable Documentation . . . . .	151
7.119.1.1 searchData . . . . .	151
7.120html/search/functions_b.js File Reference . . . . .	151
7.120.1 Variable Documentation . . . . .	152
7.120.1.1 searchData . . . . .	152
7.121html/search/functions_c.js File Reference . . . . .	152
7.121.1 Variable Documentation . . . . .	152
7.121.1.1 searchData . . . . .	152
7.122html/search/functions_d.js File Reference . . . . .	152
7.122.1 Variable Documentation . . . . .	153
7.122.1.1 searchData . . . . .	153
7.123html/search/functions_e.js File Reference . . . . .	153

7.123.1 Variable Documentation . . . . .	153
7.123.1.1 searchData . . . . .	153
7.124html/search/functions_f.js File Reference . . . . .	154
7.124.1 Variable Documentation . . . . .	154
7.124.1.1 searchData . . . . .	154
7.125html/search/pages_0.js File Reference . . . . .	154
7.125.1 Variable Documentation . . . . .	154
7.125.1.1 searchData . . . . .	154
7.126html/search/pages_1.js File Reference . . . . .	155
7.126.1 Variable Documentation . . . . .	155
7.126.1.1 searchData . . . . .	155
7.127html/search/search.js File Reference . . . . .	155
7.127.1 Function Documentation . . . . .	155
7.127.1.1 convertTold(search) . . . . .	155
7.127.1.2 createResults() . . . . .	155
7.127.1.3 getXPos(item) . . . . .	155
7.127.1.4 getYPos(item) . . . . .	156
7.127.1.5 init_search() . . . . .	156
7.127.1.6 SearchBox(name, resultsPath, inFrame, label) . . . . .	156
7.127.1.7 SearchResults(name) . . . . .	156
7.127.1.8 setClassAttr(elem, attr) . . . . .	156
7.127.1.9 setKeyActions(elem, action) . . . . .	156
7.128html/search/searchdata.js File Reference . . . . .	156
7.128.1 Variable Documentation . . . . .	156
7.128.1.1 indexSectionLabels . . . . .	156
7.128.1.2 indexSectionNames . . . . .	157
7.128.1.3 indexSectionsWithContent . . . . .	157
7.129html/search/typedefs_0.js File Reference . . . . .	157
7.129.1 Variable Documentation . . . . .	157
7.129.1.1 searchData . . . . .	157

7.130html/search/variables_0.js File Reference . . . . .	158
7.130.1 Variable Documentation . . . . .	158
7.130.1.1 searchData . . . . .	158
7.131html/search/variables_1.js File Reference . . . . .	158
7.131.1 Variable Documentation . . . . .	158
7.131.1.1 searchData . . . . .	158
7.132html/search/variables_10.js File Reference . . . . .	159
7.132.1 Variable Documentation . . . . .	159
7.132.1.1 searchData . . . . .	159
7.133html/search/variables_11.js File Reference . . . . .	159
7.133.1 Variable Documentation . . . . .	159
7.133.1.1 searchData . . . . .	159
7.134html/search/variables_12.js File Reference . . . . .	160
7.134.1 Variable Documentation . . . . .	160
7.134.1.1 searchData . . . . .	160
7.135html/search/variables_13.js File Reference . . . . .	160
7.135.1 Variable Documentation . . . . .	160
7.135.1.1 searchData . . . . .	160
7.136html/search/variables_14.js File Reference . . . . .	160
7.136.1 Variable Documentation . . . . .	161
7.136.1.1 searchData . . . . .	161
7.137html/search/variables_15.js File Reference . . . . .	161
7.137.1 Variable Documentation . . . . .	161
7.137.1.1 searchData . . . . .	161
7.138html/search/variables_2.js File Reference . . . . .	161
7.138.1 Variable Documentation . . . . .	161
7.138.1.1 js . . . . .	161
7.138.1.2 searchData . . . . .	162
7.139html/search/variables_3.js File Reference . . . . .	162
7.139.1 Variable Documentation . . . . .	162

7.139.1.1 searchData . . . . .	162
7.140html/search/variables_4.js File Reference . . . . .	162
7.140.1 Variable Documentation . . . . .	162
7.140.1.1 searchData . . . . .	162
7.141html/search/variables_5.js File Reference . . . . .	163
7.141.1 Variable Documentation . . . . .	163
7.141.1.1 searchData . . . . .	163
7.142html/search/variables_6.js File Reference . . . . .	163
7.142.1 Variable Documentation . . . . .	163
7.142.1.1 searchData . . . . .	163
7.143html/search/variables_7.js File Reference . . . . .	164
7.143.1 Variable Documentation . . . . .	164
7.143.1.1 js . . . . .	164
7.143.1.2 searchData . . . . .	164
7.144html/search/variables_8.js File Reference . . . . .	164
7.144.1 Variable Documentation . . . . .	164
7.144.1.1 searchData . . . . .	164
7.145html/search/variables_9.js File Reference . . . . .	165
7.145.1 Variable Documentation . . . . .	165
7.145.1.1 searchData . . . . .	165
7.146html/search/variables_a.js File Reference . . . . .	165
7.146.1 Variable Documentation . . . . .	165
7.146.1.1 searchData . . . . .	165
7.147html/search/variables_b.js File Reference . . . . .	165
7.147.1 Variable Documentation . . . . .	166
7.147.1.1 searchData . . . . .	166
7.148html/search/variables_c.js File Reference . . . . .	166
7.148.1 Variable Documentation . . . . .	166
7.148.1.1 js . . . . .	166
7.148.1.2 searchData . . . . .	166



7.149html/search/variables_d.js File Reference . . . . .	166
7.149.1 Variable Documentation . . . . .	167
7.149.1.1 searchData . . . . .	167
7.150html/search/variables_e.js File Reference . . . . .	167
7.150.1 Variable Documentation . . . . .	167
7.150.1.1 searchData . . . . .	167
7.151html/search/variables_f.js File Reference . . . . .	167
7.151.1 Variable Documentation . . . . .	167
7.151.1.1 js . . . . .	167
7.151.1.2 searchData . . . . .	168
7.152README.md File Reference . . . . .	168
7.153source/Game.cpp File Reference . . . . .	168
7.154source/GameOverState.cpp File Reference . . . . .	168
7.155source/GameState.cpp File Reference . . . . .	168
7.156source/GameStateMachine.cpp File Reference . . . . .	169
7.157source/InputManager.cpp File Reference . . . . .	169
7.158source/Logfile.cpp File Reference . . . . .	169
7.159source/main.cpp File Reference . . . . .	169
7.159.1 Function Documentation . . . . .	169
7.159.1.1 main(int argc, char *argv[]) . . . . .	169
7.160source/MenuButton.cpp File Reference . . . . .	169
7.161source/MenuState.cpp File Reference . . . . .	170
7.162source/Net.cpp File Reference . . . . .	170
7.163source/PauseState.cpp File Reference . . . . .	170
7.164source/PlayState.cpp File Reference . . . . .	170
7.165source/SettingState.cpp File Reference . . . . .	170
7.166source/SoundManager.cpp File Reference . . . . .	170
7.167source/SystemTime.cpp File Reference . . . . .	171
7.168source/Texture.cpp File Reference . . . . .	171
7.169source/TextureManager.cpp File Reference . . . . .	171
7.170source/Timer.cpp File Reference . . . . .	171
7.171source/Vector2D.cpp File Reference . . . . .	171



# Chapter 1

## sdl\_framework

### Links zur SDL und ihren Modulen

- `SDL 2 Core Files`
- `SDL 2 GFX`
- `SDL 2 Image`
- `SDL 2 Mixer`
- `SDL 2 Net`
- `SDL 2 TTF`
- `Harfbuzz Text Shaping`

### Tutorials

- `LazyFoo Productions`
- `SDLTutorial.com`
- `List of Tutorial Sites in the WWW`

### Installation der SDL oder eines Moduls unter Linux

- `./configure`
- `make`
- `sudo make install`

### Linker-Flags

- `-lSDL2`
- `-lSDL2_gfx`
- `-lSDL2_image`
- `-lSDL2_mixer`
- `-lSDL2_net`
- `-lSDL2_ttf`

### JSON Parser for Modern C++ by Niels Lohmann

`-JSON Parser for Modern C++`



## Chapter 2

# Bug List

**File Viewport.hpp (p. 93)**

No bugs known



## Chapter 3

# Hierarchical Index

### 3.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

_IpAddress . . . . .	13
Button . . . . .	14
Game . . . . .	19
GameObject . . . . .	22
MenuButton . . . . .	42
GameState . . . . .	27
GameOverState . . . . .	25
MenuState . . . . .	44
PauseState . . . . .	49
PlayState . . . . .	51
SettingState . . . . .	53
GameStateMachine . . . . .	33
GFXAsset . . . . .	35
ImageAsset . . . . .	36
InputManager . . . . .	38
Logfile . . . . .	40
Net . . . . .	46
NetMessage . . . . .	47
SoundManager . . . . .	55
SystemTime . . . . .	59
TcpSocket . . . . .	61
ClientSocket . . . . .	17
HostSocket . . . . .	35
TextAsset . . . . .	63
Texture . . . . .	65
TextureManager . . . . .	68
Timer . . . . .	75
Vector2D . . . . .	78
Viewport . . . . .	80





## Chapter 4

# Class Index

### 4.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

<b>_IpAddress</b> . . . . .	13
<b>Button</b>	
<b>Button</b> (p. 14) struct Structure for saving init values of a button . . . . .	14
<b>ClientSocket</b> . . . . .	17
<b>Game</b> . . . . .	19
<b>GameObject</b> . . . . .	22
<b>GameOverState</b> . . . . .	25
<b>GameState</b> . . . . .	27
<b>GameStateMachine</b> . . . . .	33
<b>GFXAsset</b>	
<b>GFXAsset</b> (p. 35) A structure which contains all necessary data of an gfx . . . . .	35
<b>HostSocket</b> . . . . .	35
<b>ImageAsset</b>	
<b>ImageAsset</b> (p. 36) A structure which contains all necessary data of an image . . . . .	36
<b>InputManager</b> . . . . .	38
<b>Logfile</b> . . . . .	40
<b>MenuButton</b> . . . . .	42
<b>MenuState</b> . . . . .	44
<b>Net</b> . . . . .	46
<b>NetMessage</b> . . . . .	47
<b>PauseState</b> . . . . .	49
<b>PlayState</b> . . . . .	51
<b>SettingState</b> . . . . .	53
<b>SoundManager</b> . . . . .	55
<b>SystemTime</b> . . . . .	59
<b>TcpSocket</b> . . . . .	61
<b>TextAsset</b>	
<b>TextAsset</b> (p. 63) A structure which contains all necessary data of an text . . . . .	63
<b>Texture</b> . . . . .	65
<b>TextureManager</b> . . . . .	68
<b>Timer</b> . . . . .	75
<b>Vector2D</b> . . . . .	78
<b>Viewport</b>	
Struct <b>Viewport</b> (p. 80) Uses some parameters to describe a framework viewport . . . . .	80



## Chapter 5

# File Index

### 5.1 File List

Here is a list of all files with brief descriptions:

header/ <b>Asset.hpp</b>	83
header/ <b>CommonEnums.hpp</b>	83
header/ <b>Game.hpp</b>	85
header/ <b>GameObject.hpp</b>	85
header/ <b>GameOverState.hpp</b>	86
header/ <b>GameState.hpp</b>	86
header/ <b>GameStateMachine.hpp</b>	87
header/ <b>InputManager.hpp</b>	87
header/ <b>Logfile.hpp</b>	88
header/ <b>MenuButton.hpp</b>	88
header/ <b>MenuState.hpp</b>	89
header/ <b>Net.hpp</b>	89
header/ <b>PauseState.hpp</b>	90
header/ <b>PlayState.hpp</b>	90
header/ <b>SettingState.hpp</b>	90
header/ <b>SoundManager.hpp</b>	91
header/ <b>SystemTime.hpp</b>	91
header/ <b>Texture.hpp</b>	92
header/ <b>TextureManager.hpp</b>	92
header/ <b>Timer.hpp</b>	93
header/ <b>Vector2D.hpp</b>	93
header/ <b>Viewport.hpp</b>	
Struct for handling a viewport in the <b>TextureManager</b> (p. 68)	93
html/ <b>dynsections.js</b>	94
html/ <b>jquery.js</b>	95
html/search/ <b>all_0.js</b>	106
html/search/ <b>all_1.js</b>	107
html/search/ <b>all_10.js</b>	107
html/search/ <b>all_11.js</b>	108
html/search/ <b>all_12.js</b>	108
html/search/ <b>all_13.js</b>	109
html/search/ <b>all_14.js</b>	110
html/search/ <b>all_15.js</b>	110
html/search/ <b>all_16.js</b>	111
html/search/ <b>all_17.js</b>	111

html/search/all_18.js	112
html/search/all_19.js	112
html/search/all_1a.js	112
html/search/all_1b.js	113
html/search/all_2.js	113
html/search/all_3.js	114
html/search/all_4.js	114
html/search/all_5.js	115
html/search/all_6.js	115
html/search/all_7.js	116
html/search/all_8.js	116
html/search/all_9.js	117
html/search/all_a.js	117
html/search/all_b.js	118
html/search/all_c.js	118
html/search/all_d.js	119
html/search/all_e.js	119
html/search/all_f.js	120
html/search/classes_0.js	120
html/search/classes_1.js	121
html/search/classes_2.js	121
html/search/classes_3.js	121
html/search/classes_4.js	122
html/search/classes_5.js	122
html/search/classes_6.js	123
html/search/classes_7.js	123
html/search/classes_8.js	124
html/search/classes_9.js	124
html/search/classes_a.js	124
html/search/classes_b.js	125
html/search/classes_c.js	125
html/search/enums_0.js	126
html/search/enums_1.js	126
html/search/enums_2.js	127
html/search/enums_3.js	127
html/search/enums_4.js	127
html/search/enumvalues_0.js	128
html/search/enumvalues_1.js	128
html/search/enumvalues_2.js	129
html/search/enumvalues_3.js	129
html/search/enumvalues_4.js	130
html/search/enumvalues_5.js	130
html/search/enumvalues_6.js	130
html/search/enumvalues_7.js	131
html/search/enumvalues_8.js	131
html/search/enumvalues_9.js	132
html/search/enumvalues_a.js	132
html/search/enumvalues_b.js	133
html/search/files_0.js	133
html/search/files_1.js	134
html/search/files_10.js	134
html/search/files_11.js	134
html/search/files_2.js	135
html/search/files_3.js	135
html/search/files_4.js	136
html/search/files_5.js	136
html/search/files_6.js	137
html/search/files_7.js	137

html/search/files_8.js	138
html/search/files_9.js	138
html/search/files_a.js	138
html/search/files_b.js	139
html/search/files_c.js	139
html/search/files_d.js	140
html/search/files_e.js	140
html/search/files_f.js	141
html/search/functions_0.js	141
html/search/functions_1.js	142
html/search/functions_10.js	142
html/search/functions_11.js	143
html/search/functions_12.js	144
html/search/functions_13.js	144
html/search/functions_14.js	145
html/search/functions_15.js	146
html/search/functions_16.js	146
html/search/functions_17.js	146
html/search/functions_2.js	147
html/search/functions_3.js	147
html/search/functions_4.js	148
html/search/functions_5.js	149
html/search/functions_6.js	149
html/search/functions_7.js	149
html/search/functions_8.js	150
html/search/functions_9.js	150
html/search/functions_a.js	151
html/search/functions_b.js	151
html/search/functions_c.js	152
html/search/functions_d.js	152
html/search/functions_e.js	153
html/search/functions_f.js	154
html/search/pages_0.js	154
html/search/pages_1.js	155
html/search/search.js	155
html/search/searchdata.js	156
html/search/typedefs_0.js	157
html/search/variables_0.js	158
html/search/variables_1.js	158
html/search/variables_10.js	159
html/search/variables_11.js	159
html/search/variables_12.js	160
html/search/variables_13.js	160
html/search/variables_14.js	160
html/search/variables_15.js	161
html/search/variables_2.js	161
html/search/variables_3.js	162
html/search/variables_4.js	162
html/search/variables_5.js	163
html/search/variables_6.js	163
html/search/variables_7.js	164
html/search/variables_8.js	164
html/search/variables_9.js	165
html/search/variables_a.js	165
html/search/variables_b.js	165
html/search/variables_c.js	166
html/search/variables_d.js	166
html/search/variables_e.js	167

html/search/variables_f.js . . . . .	167
source/Game.cpp . . . . .	168
source/GameOverState.cpp . . . . .	168
source/GameState.cpp . . . . .	168
source/GameStateMachine.cpp . . . . .	169
source/InputManager.cpp . . . . .	169
source/Logfile.cpp . . . . .	169
source/main.cpp . . . . .	169
source/MenuButton.cpp . . . . .	169
source/MenuState.cpp . . . . .	170
source/Net.cpp . . . . .	170
source/PauseState.cpp . . . . .	170
source/PlayState.cpp . . . . .	170
source/SettingState.cpp . . . . .	170
source/SoundManager.cpp . . . . .	170
source/SystemTime.cpp . . . . .	171
source/Texture.cpp . . . . .	171
source/TextureManager.cpp . . . . .	171
source/Timer.cpp . . . . .	171
source/Vector2D.cpp . . . . .	171

## Chapter 6

# Class Documentation

### 6.1 `_IpAddress` Class Reference

```
#include <Net.hpp>
```

#### Public Member Functions

- `_IpAddress ()`
- `_IpAddress (Uint16 port)`
- `_IpAddress (std::string host, Uint16 port)`
- `void SetIp (IPaddress sdl_ip)`
- `bool Ok () const`
- `IPaddress GetIpAddress () const`
- `Uint32 GetHost () const`
- `Uint16 GetPort () const`

#### 6.1.1 Detailed Description

Definition at line 57 of file Net.hpp.

#### 6.1.2 Constructor & Destructor Documentation

##### 6.1.2.1 `_IpAddress::_IpAddress ( )`

Definition at line 90 of file Net.cpp.

##### 6.1.2.2 `_IpAddress::_IpAddress ( Uint16 port )` `[explicit]`

Definition at line 70 of file Net.cpp.

### 6.1.2.3 `_IpAddress::_IpAddress ( std::string host, Uint16 port )`

Definition at line 80 of file Net.cpp.

## 6.1.3 Member Function Documentation

### 6.1.3.1 `Uint32 _IpAddress::GetHost ( ) const`

Definition at line 112 of file Net.cpp.

### 6.1.3.2 `IPaddress _IpAddress::GetIpAddress ( ) const`

Definition at line 107 of file Net.cpp.

### 6.1.3.3 `Uint16 _IpAddress::GetPort ( ) const`

Definition at line 117 of file Net.cpp.

### 6.1.3.4 `bool _IpAddress::Ok ( ) const`

Definition at line 96 of file Net.cpp.

### 6.1.3.5 `void _IpAddress::SetIp ( IPaddress sdl_ip )`

Definition at line 102 of file Net.cpp.

The documentation for this class was generated from the following files:

- header/**Net.hpp**
- source/**Net.cpp**

## 6.2 Button Struct Reference

**Button** (p. 14) struct Structure for saving init values of a button.

```
#include <MenuButton.hpp>
```



## Public Attributes

- int **x1** = 0
- int **x2** = 0
- int **y1** = 0
- int **y2** = 0
- int **x** = 0
- int **y** = 0
- std::string **textureID** = "none"
- std::string **viewportID** = "none"
- std::string **fontID** = "none"
- std::string **colorID** = "none"
- double **angle** = 0.0d
- unsigned **r** = 0
- unsigned **g** = 85
- unsigned **b** = 170
- unsigned **a** = 255
- std::function< void()> **func** = nullptr
- SDL\_Rect **destRect** = {0}
- SDL\_Rect **srcRect** = {0}
- SDL\_Point **center** = {0}
- **FLIP** **sdIFlip** = **FLIP::NONE**
- **TEXTQUALITY** **textQuality** = **TEXTQUALITY::SOLID**

### 6.2.1 Detailed Description

**Button** (p. 14) struct Structure for saving init values of a button.

Definition at line 21 of file MenuButton.hpp.

### 6.2.2 Member Data Documentation

#### 6.2.2.1 unsigned Button::a = 255

Definition at line 26 of file MenuButton.hpp.

#### 6.2.2.2 double Button::angle = 0.0d

Definition at line 25 of file MenuButton.hpp.

#### 6.2.2.3 unsigned Button::b = 170

Definition at line 26 of file MenuButton.hpp.

#### 6.2.2.4 SDL\_Point Button::center = {0}

Definition at line 30 of file MenuButton.hpp.

**6.2.2.5** `std::string Button::colorID = "none"`

Definition at line 24 of file MenuButton.hpp.

**6.2.2.6** `SDL_Rect Button::destRect = {}`

Definition at line 28 of file MenuButton.hpp.

**6.2.2.7** `std::string Button::fontID = "none"`

Definition at line 24 of file MenuButton.hpp.

**6.2.2.8** `std::function<void()> Button::func = nullptr`

Definition at line 27 of file MenuButton.hpp.

**6.2.2.9** `unsigned Button::g = 85`

Definition at line 26 of file MenuButton.hpp.

**6.2.2.10** `unsigned Button::r = 0`

Definition at line 26 of file MenuButton.hpp.

**6.2.2.11** `FLIP Button::sdlFlip = FLIP::NONE`

Definition at line 31 of file MenuButton.hpp.

**6.2.2.12** `SDL_Rect Button::srcRect = {}`

Definition at line 29 of file MenuButton.hpp.

**6.2.2.13** `TEXTQUALITY Button::textQuality = TEXTQUALITY::SOLID`

Definition at line 32 of file MenuButton.hpp.

**6.2.2.14** `std::string Button::textureID = "none"`

Definition at line 24 of file MenuButton.hpp.

6.2.2.15 `std::string Button::viewportID = "none"`

Definition at line 24 of file MenuButton.hpp.

6.2.2.16 `int Button::x = 0`

Definition at line 23 of file MenuButton.hpp.

6.2.2.17 `int Button::x1 = 0`

Definition at line 23 of file MenuButton.hpp.

6.2.2.18 `int Button::x2 = 0`

Definition at line 23 of file MenuButton.hpp.

6.2.2.19 `int Button::y = 0`

Definition at line 23 of file MenuButton.hpp.

6.2.2.20 `int Button::y1 = 0`

Definition at line 23 of file MenuButton.hpp.

6.2.2.21 `int Button::y2 = 0`

Definition at line 23 of file MenuButton.hpp.

The documentation for this struct was generated from the following file:

- header/**MenuButton.hpp**

## 6.3 ClientSocket Class Reference

```
#include <Net.hpp>
```

Inherits **TcpSocket**.

## Public Member Functions

- **ClientSocket** ()
- **ClientSocket** (std::string host, Uint16 port)
- bool **Connect** ( **\_IpAddress** &remoteip)
- bool **Connect** (**HostSocket** &the\_listener\_socket)
- void **SetSocket** (TCPsocket the\_sdl\_socket)
- **\_IpAddress** **getIpAddress** () const
- virtual void **OnReady** ()
- bool **Receive** (**NetMessage** &rData)
- bool **Send** (**NetMessage** &sData)

## Additional Inherited Members

### 6.3.1 Detailed Description

Definition at line 121 of file Net.hpp.

### 6.3.2 Constructor & Destructor Documentation

#### 6.3.2.1 ClientSocket::ClientSocket ( )

Definition at line 231 of file Net.cpp.

#### 6.3.2.2 ClientSocket::ClientSocket ( std::string *host*, Uint16 *port* )

Definition at line 236 of file Net.cpp.

### 6.3.3 Member Function Documentation

#### 6.3.3.1 bool ClientSocket::Connect ( **\_IpAddress** & *remoteip* )

Definition at line 256 of file Net.cpp.

#### 6.3.3.2 bool ClientSocket::Connect ( **HostSocket** & *the\_listener\_socket* )

Definition at line 251 of file Net.cpp.

#### 6.3.3.3 **\_IpAddress** ClientSocket::getIpAddress ( ) const

Definition at line 291 of file Net.cpp.

#### 6.3.3.4 void ClientSocket::OnReady ( ) [virtual]

Reimplemented from **TcpSocket** (p. 62).

Definition at line 346 of file Net.cpp.

#### 6.3.3.5 bool ClientSocket::Receive ( NetMessage & rData )

Definition at line 296 of file Net.cpp.

#### 6.3.3.6 bool ClientSocket::Send ( NetMessage & sData )

Definition at line 323 of file Net.cpp.

#### 6.3.3.7 void ClientSocket::SetSocket ( TCPsocket the\_sdl\_socket ) [virtual]

Reimplemented from **TcpSocket** (p. 62).

Definition at line 272 of file Net.cpp.

The documentation for this class was generated from the following files:

- header/**Net.hpp**
- source/**Net.cpp**

## 6.4 Game Class Reference

```
#include <Game.hpp>
```

### Public Member Functions

- bool **init** ()  
*init Initialises the game variables*
- const bool & **isRunning** () const  
*isRunning Is the game still running?*
- SDL\_Renderer \* **getRenderer** () const  
*getRenderer Read only access to the renderer*
- SDL\_Window \* **getWindow** () const  
*getWindow Read only access to the window*
- void **delay** ()  
*delay Creates a delay if necessary, for capping frame rate*
- void **render** ()  
*render Renders the game to the screen*
- void **handleEvents** ()  
*handleEvents Handles the events for the game*
- void **update** ()  
*update Updates the game*
- void **quit** ()  
*quit Quits the game*
- void **freeMemory** ()  
*freeMemory Frees the memory used by the game*

## Static Public Member Functions

- static **Game \* Instance** ()

*Instance Instance returns a pointer to the singleton.*

### 6.4.1 Detailed Description

Definition at line 20 of file Game.hpp.

### 6.4.2 Member Function Documentation

#### 6.4.2.1 void Game::delay ( )

delay Creates a delay if necessary, for capping frame rate

Definition at line 169 of file Game.cpp.

#### 6.4.2.2 void Game::freeMemory ( ) [inline]

freeMemory Frees the memory used by the game

Definition at line 116 of file Game.hpp.

#### 6.4.2.3 SDL\_Renderer\* Game::getRenderer ( ) const [inline]

getRenderer Read only access to the renderer

##### Returns

SDL\_Renderer pointer

Definition at line 62 of file Game.hpp.

#### 6.4.2.4 SDL\_Window\* Game::getWindow ( ) const [inline]

getWindow Read only access to the window

##### Returns

SDL\_Window pointer

Definition at line 70 of file Game.hpp.

#### 6.4.2.5 void Game::handleEvents ( )

handleEvents Handles the events for the game

Definition at line 227 of file Game.cpp.

#### 6.4.2.6 bool Game::init ( )

init Initialises the game variables

##### Returns

bool true if init was successful, false if not

Definition at line 80 of file Game.cpp.

#### 6.4.2.7 static Game\* Game::Instance ( ) [inline], [static]

Instance Instance returns a pointer to the singleton.

##### Returns

game pointer to singleton

Definition at line 30 of file Game.hpp.

#### 6.4.2.8 const bool& Game::isRunning ( ) const [inline]

isRunning Is the game still running?

##### Returns

bool true is still running, false if not

Definition at line 54 of file Game.hpp.

#### 6.4.2.9 void Game::quit ( ) [inline]

quit Quits the game

Definition at line 108 of file Game.hpp.

#### 6.4.2.10 void Game::render ( )

render Renders the game to the screen

Definition at line 199 of file Game.cpp.

#### 6.4.2.11 void Game::update ( )

update Updates the game

Definition at line 233 of file Game.cpp.

The documentation for this class was generated from the following files:

- header/**Game.hpp**
- source/**Game.cpp**

## 6.5 GameObject Class Reference

```
#include <GameObject.hpp>
```

Inherited by **MenuButton**.

### Public Member Functions

- **GameObject ()**  
*GameObject* (p. 22) standard ctor Initialises all members with default values.
- **GameObject (Vector2D position, int width, int height, double angle, unsigned r, unsigned g, unsigned b, unsigned a)**  
*GameObject* (p. 22) ctor Initialises all members with parameters.
- virtual **~GameObject ()**  
*Dtor Lazy dtor, does nothing.*
- virtual void **draw ()=0**  
*Draw Virtual draw method, will be implemented in child classes Draws the game object to the screen.*
- virtual void **update ()=0**  
*Update Virtual update method, will be implemented in child classes Updates the game object, things like collision detection and such.*
- const **Vector2D & getPosition () const**  
*Update Virtual update method, will be implemented in child classes Updates the game object, things like collision detection and such.*
- const int **getHeight () const**  
*getHeight Getter for the height of the game object*
- const int **getWidth () const**  
*getWidth Getter for the width of the game object*

### Protected Attributes

- **Vector2D position**  
*Vector member to store the position.*
- int **width**  
*Member to store the width.*
- int **height**  
*Member to store the height.*
- double **angle**  
*Member to store the angle.*
- unsigned **r**
- unsigned **g**
- unsigned **b**
- unsigned **a**  
*Member for red, green, blue and alpha values.*



### 6.5.1 Detailed Description

Definition at line 16 of file GameObject.hpp.

### 6.5.2 Constructor & Destructor Documentation

#### 6.5.2.1 `GameObject::GameObject ( )` `[inline]`

**GameObject** (p. 22) standard ctor Initialises all members with default values.

Definition at line 25 of file GameObject.hpp.

#### 6.5.2.2 `GameObject::GameObject ( Vector2D position, int width, int height, double angle, unsigned r, unsigned g, unsigned b, unsigned a )` `[inline]`

**GameObject** (p. 22) ctor Initialises all members with parameters.

Definition at line 35 of file GameObject.hpp.

#### 6.5.2.3 `virtual GameObject::~~GameObject ( )` `[inline],[virtual]`

Dtor Lazy dtor, does nothing.

Definition at line 47 of file GameObject.hpp.

### 6.5.3 Member Function Documentation

#### 6.5.3.1 `virtual void GameObject::draw ( )` `[pure virtual]`

Draw Virtual draw method, will be implemented in child classes Draws the game object to the screen.

Implemented in **MenuButton** (p. 43).

#### 6.5.3.2 `const int GameObject::getHeight ( ) const` `[inline]`

getHeight Getter for the height of the game object

Definition at line 81 of file GameObject.hpp.

#### 6.5.3.3 `const Vector2D& GameObject::getPosition ( ) const` `[inline]`

Update Virtual update method, will be implemented in child classes Updates the game object, things like collision detection and such.

Definition at line 73 of file GameObject.hpp.

#### 6.5.3.4 `const int GameObject::getWidth ( ) const` `[inline]`

getWidth Getter for the width of the game object

Definition at line 88 of file `GameObject.hpp`.

#### 6.5.3.5 `virtual void GameObject::update ( )` `[pure virtual]`

Update Virtual update method, will be implemented in child classes Updates the game object, things like collision detection and such.

Implemented in **MenuButton** (p. 44).

### 6.5.4 Member Data Documentation

#### 6.5.4.1 `unsigned GameObject::a` `[protected]`

Member for red, green, blue and alpha values.

Definition at line 98 of file `GameObject.hpp`.

#### 6.5.4.2 `double GameObject::angle` `[protected]`

Member to store the angle.

Definition at line 96 of file `GameObject.hpp`.

#### 6.5.4.3 `unsigned GameObject::b` `[protected]`

Definition at line 98 of file `GameObject.hpp`.

#### 6.5.4.4 `unsigned GameObject::g` `[protected]`

Definition at line 98 of file `GameObject.hpp`.

#### 6.5.4.5 `int GameObject::height` `[protected]`

Member to store the height.

Definition at line 94 of file `GameObject.hpp`.

#### 6.5.4.6 `Vector2D GameObject::position` `[protected]`

Vector member to store the position.

Definition at line 91 of file `GameObject.hpp`.

## 6.5.4.7 unsigned GameObject::r [protected]

Definition at line 98 of file GameObject.hpp.

## 6.5.4.8 int GameObject::width [protected]

Member to store the width.

Definition at line 93 of file GameObject.hpp.

The documentation for this class was generated from the following file:

- header/**GameObject.hpp**

## 6.6 GameState Class Reference

```
#include <GameOverState.hpp>
```

Inherits **GameState**.

### Public Member Functions

- **GameOverState (GameStateMachine &stateMachine)**  
*Explicit state constructor Creates a state.*
- bool **update ()**  
*Update of the State Creates a setting state.*
- void **render ()**  
*Render the State Renders the state to the screen.*
- bool **handleEvents ()**  
*Handle events of the State Handles all events in the state.*
- bool **onEnter** (std::string fileName)  
*OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...*
- bool **onExit** ()  
*OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...*

### Additional Inherited Members

#### 6.6.1 Detailed Description

Definition at line 12 of file GameState.hpp.

#### 6.6.2 Constructor & Destructor Documentation

## 6.6.2.1 GameState::GameState ( GameStateMachine &amp; stateMachine ) [explicit]

Explicit state constructor Creates a state.

## Parameters

<i>reference</i>	to the <b>GameStateMachine</b> (p. 33)
------------------	--

Definition at line 10 of file GameState.cpp.

### 6.6.3 Member Function Documentation

#### 6.6.3.1 bool GameState::handleEvents ( ) [virtual]

Handle events of the State Handles all events in the state.

## Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 25 of file GameState.cpp.

#### 6.6.3.2 bool GameState::onEnter ( std::string fileName ) [virtual]

OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Parameters

<i>fileName</i>	contains the filename with the data
-----------------	-------------------------------------

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 30 of file GameState.cpp.

#### 6.6.3.3 bool GameState::onExit ( ) [virtual]

OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 46 of file GameState.cpp.

#### 6.6.3.4 void GameState::render ( ) [virtual]

Render the State Renders the state to the screen.

Reimplemented from **GameState** (p. 30).

Definition at line 20 of file GameState.cpp.

#### 6.6.3.5 bool GameState::update ( ) [virtual]

Update of the State Creates a setting state.

##### Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 30).

Definition at line 15 of file GameState.cpp.

The documentation for this class was generated from the following files:

- header/**GameOverState.hpp**
- source/**GameOverState.cpp**

## 6.7 GameState Class Reference

```
#include <GameState.hpp>
```

Inherited by **GameOverState**, **MenuState**, **PauseState**, **PlayState**, and **SettingState**.

### Public Member Functions

- **GameState** (**GameStateMachine** &stateMachine)  
*Constructor Initialises all member variables defined below.*
- virtual bool **update** ()  
*update Updates the state Defined virtual to keep it polymorphic*
- virtual void **render** ()  
*render Renders the state Defined virtual to keep it polymorphic*
- virtual bool **handleEvents** ()  
*handleEvents Handles events within the state Defined virtual to keep it polymorphic*
- virtual bool **onEnter** (std::string fileName)  
*onEnter Loads resources from a file Resources are images, texts, gfx, sound, music and such*
- virtual bool **onExit** ()  
*onExit Unloads all resources which were loaded onEnter*

## Protected Member Functions

- void **requestStackPush** (**States** stateID)  
*Sends a push request to the state machine.*
- void **requestStackPop** ()  
*Sends a pop request to the state machine.*
- void **requestStackClear** ()  
*Sends a clear request to the state machine.*

## Protected Attributes

- std::vector< **GameObject** \* > **gameObjects**  
*All GameObjects like buttons and such.*
- std::vector< **ImageAsset** > **assets**  
*Vector for ImageAssets.*
- std::vector< std::string > **buttonKeys**  
*Vector for buttonKeys.*
- std::vector< std::string > **colorKeys**  
*Vector for colorKeys.*
- std::vector< std::string > **musicKeys**  
*Vector for musicKeys.*
- std::vector< std::string > **soundKeys**  
*Vector for soundKeys.*
- std::vector< **TextAsset** > **textAssets**  
*Vector for textAssets.*
- std::vector< std::string > **ttfKeys**  
*Vector for ttfKeys.*
- std::vector< **Viewport** > **viewports**  
*Vector for viewports.*
- SDL\_Rect **screenSize**  
*Screen size rectangle, for alingment.*
- nlohmann::ordered\_json **stateJson**  
*Parsed file is stored in this variable.*
- nlohmann::ordered\_json **name**
- nlohmann::ordered\_json **text**
- nlohmann::ordered\_json **color**
- nlohmann::ordered\_json **ttf**  
*Some variables necessary for loading.*
- std::map< std::string, std::function< void()> > > **functionMap**  
*Function map for the lambda expressions.*

### 6.7.1 Detailed Description

Definition at line 25 of file GameState.hpp.

### 6.7.2 Constructor & Destructor Documentation

#### 6.7.2.1 GameState::GameState ( GameStateMachine & stateMachine ) [explicit]

Constructor Initialises all member variables defined below.

## Parameters

<i>stateMachine</i>	reference for access
---------------------	----------------------

Definition at line 8 of file GameState.cpp.

### 6.7.3 Member Function Documentation

#### 6.7.3.1 bool GameState::handleEvents ( ) [virtual]

handleEvents Handles events within the state Defined virtual to keep it polymorphic

Reimplemented in **GameOverState** (p. 26), **MenuState** (p. 45), **PauseState** (p. 50), **PlayState** (p. 52), and **SettingState** (p. 54).

Definition at line 78 of file GameState.cpp.

#### 6.7.3.2 bool GameState::onEnter ( std::string fileName ) [virtual]

onEnter Loads resources from a file Resources are images, texts, gfx, sound, music and such

## Parameters

<i>fileName</i>	as std::string for loading
-----------------	----------------------------

## See also

**onExit** (p. 29)

Reimplemented in **GameOverState** (p. 26), **MenuState** (p. 45), **PauseState** (p. 50), **PlayState** (p. 52), and **SettingState** (p. 54).

Definition at line 83 of file GameState.cpp.

#### 6.7.3.3 bool GameState::onExit ( ) [virtual]

onExit Unloads all resources which were loaded onEnter

## Parameters

<i>stateMachine</i>	reference for access
---------------------	----------------------

## See also

**onEnter** (p. 29)

Reimplemented in **GameOverState** (p. 26), **MenuState** (p. 45), **PauseState** (p. 50), **PlayState** (p. 52), and **SettingState** (p. 54).

Definition at line 114 of file GameState.cpp.

#### 6.7.3.4 void GameState::render ( ) [virtual]

render Renders the state Defined virtual to keep it polymorphic

Reimplemented in **GameOverState** (p.27), **MenuState** (p.46), **PauseState** (p.51), **PlayState** (p.53), and **SettingState** (p.55).

Definition at line 51 of file GameState.cpp.

#### 6.7.3.5 void GameState::requestStackClear ( ) [protected]

Sends a clear request to the state machine.

Definition at line 168 of file GameState.cpp.

#### 6.7.3.6 void GameState::requestStackPop ( ) [protected]

Sends a pop request to the state machine.

Definition at line 163 of file GameState.cpp.

#### 6.7.3.7 void GameState::requestStackPush ( States stateID ) [protected]

Sends a push request to the state machine.

Definition at line 158 of file GameState.cpp.

#### 6.7.3.8 bool GameState::update ( ) [virtual]

update Updates the state Defined virtual to keep it polymorphic

Reimplemented in **GameOverState** (p.27), **MenuState** (p.46), **PauseState** (p.51), **PlayState** (p.53), and **SettingState** (p.55).

Definition at line 12 of file GameState.cpp.

### 6.7.4 Member Data Documentation

#### 6.7.4.1 std::vector<ImageAsset> GameState::assets [protected]

Vector for ImageAssets.

Definition at line 90 of file GameState.hpp.



**6.7.4.2** `std::vector<std::string> GameState::buttonKeys` [protected]

Vector for buttonKeys.

Definition at line 91 of file GameState.hpp.

**6.7.4.3** `nlohmann::ordered_json GameState::color` [protected]

Definition at line 102 of file GameState.hpp.

**6.7.4.4** `std::vector<std::string> GameState::colorKeys` [protected]

Vector for colorKeys.

Definition at line 92 of file GameState.hpp.

**6.7.4.5** `std::map<std::string, std::function<void()> > GameState::functionMap` [protected]

Function map for the lambda expressions.

Definition at line 104 of file GameState.hpp.

**6.7.4.6** `std::vector<GameObject*> GameState::gameObjects` [protected]

All GameObjects like buttons and such.

Definition at line 87 of file GameState.hpp.

**6.7.4.7** `std::vector<std::string> GameState::musicKeys` [protected]

Vector for musicKeys.

Definition at line 93 of file GameState.hpp.

**6.7.4.8** `nlohmann::ordered_json GameState::name` [protected]

Definition at line 102 of file GameState.hpp.

**6.7.4.9** `SDL_Rect GameState::screenSize` [protected]

Screen size rectangle, for alingment.

Definition at line 99 of file GameState.hpp.

#### 6.7.4.10 `std::vector<std::string> GameState::soundKeys` [protected]

Vector for soundKeys.

Definition at line 94 of file GameState.hpp.

#### 6.7.4.11 `nlohmann::ordered_json GameState::stateJson` [protected]

Parsed file is stored in this variable.

Definition at line 101 of file GameState.hpp.

#### 6.7.4.12 `nlohmann::ordered_json GameState::text` [protected]

Definition at line 102 of file GameState.hpp.

#### 6.7.4.13 `std::vector<TextAsset> GameState::textAssets` [protected]

Vector for textAssets.

Definition at line 95 of file GameState.hpp.

#### 6.7.4.14 `nlohmann::ordered_json GameState::ttf` [protected]

Some variables necessary for loading.

Definition at line 102 of file GameState.hpp.

#### 6.7.4.15 `std::vector<std::string> GameState::ttfKeys` [protected]

Vector for ttfKeys.

Definition at line 96 of file GameState.hpp.

#### 6.7.4.16 `std::vector<Viewport> GameState::viewports` [protected]

Vector for viewports.

Definition at line 97 of file GameState.hpp.

The documentation for this class was generated from the following files:

- header/**GameState.hpp**
- source/**GameState.cpp**

## 6.8 GameStateMachine Class Reference

```
#include <GameStateMachine.hpp>
```

### Public Member Functions

- **GameStateMachine** ()  
*Explicit game state machine ctor Creates a finite state machine.*
- `template<typename T >`  
`void registerState (States stateID)`  
*Template for registering states Creates a state.*
- `void pushState (States stateID)`  
*PushState Pushes a state in the pending list.*
- `void popState ()`  
*Pop state Pops the top state from the FSM.*
- `void clearStates ()`  
*Clear states Clears all states from the FSM.*
- `void update ()`  
*Update Updates the current state(s)*
- `void render ()`  
*Render Renders the current state(s)*
- `void handleEvents ()`  
*Handle events Handles the events in the current state(s)*
- `bool isEmpty () const`  
*Is the FSM empty? True if FSM is empty, false if not.*

### 6.8.1 Detailed Description

Definition at line 18 of file GameStateMachine.hpp.

### 6.8.2 Constructor & Destructor Documentation

#### 6.8.2.1 GameStateMachine::GameStateMachine ( ) [explicit]

Explicit game state machine ctor Creates a finite state machine.

Definition at line 5 of file GameStateMachine.cpp.

### 6.8.3 Member Function Documentation

#### 6.8.3.1 void GameStateMachine::clearStates ( )

Clear states Clears all states from the FSM.

Definition at line 22 of file GameStateMachine.cpp.

#### 6.8.3.2 void GameStateMachine::handleEvents ( )

Handle events Handles the events in the current state(s)

Definition at line 46 of file GameStateMachine.cpp.

#### 6.8.3.3 bool GameStateMachine::isEmpty ( ) const [inline]

Is the FSM empty? True if FSM is empty, false if not.

##### Returns

true if empty, false if not

Definition at line 91 of file GameStateMachine.hpp.

#### 6.8.3.4 void GameStateMachine::popState ( )

Pop state Pops the top state from the FSM.

Definition at line 16 of file GameStateMachine.cpp.

#### 6.8.3.5 void GameStateMachine::pushState ( States stateID )

PushState Pushes a state in the pending list.

##### Parameters

<i>stateID</i>	for a particular state
----------------	------------------------

Definition at line 10 of file GameStateMachine.cpp.

#### 6.8.3.6 template<typename T > void GameStateMachine::registerState ( States stateID )

Template for registering states Creates a state.

##### Parameters

<i>stateID</i>	for a particular state
----------------	------------------------

Definition at line 119 of file GameStateMachine.hpp.

#### 6.8.3.7 void GameStateMachine::render ( )

Render Renders the current state(s)

Definition at line 40 of file GameStateMachine.cpp.

#### 6.8.3.8 void GameStateMachine::update ( )

Update Updates the current state(s)

Definition at line 28 of file GameStateMachine.cpp.

The documentation for this class was generated from the following files:

- header/**GameStateMachine.hpp**
- source/**GameStateMachine.cpp**

## 6.9 GFXAsset Struct Reference

**GFXAsset** (p. 35) A structure which contains all necessary data of an gfx.

```
#include <Asset.hpp>
```

### 6.9.1 Detailed Description

**GFXAsset** (p. 35) A structure which contains all necessary data of an gfx.

Definition at line 21 of file Asset.hpp.

The documentation for this struct was generated from the following file:

- header/**Asset.hpp**

## 6.10 HostSocket Class Reference

```
#include <Net.hpp>
```

Inherits **TcpSocket**.

### Public Member Functions

- **HostSocket** (**\_IpAddress** &the\_ip\_address)
- **HostSocket** (UInt16 port)
- bool **Accept** (**ClientSocket** &)
- virtual void **OnReady** ()

### Additional Inherited Members

### 6.10.1 Detailed Description

Definition at line 108 of file Net.hpp.

### 6.10.2 Constructor & Destructor Documentation

#### 6.10.2.1 `HostSocket::HostSocket ( _IpAddress & the_ip_address ) [explicit]`

Definition at line 178 of file Net.cpp.

#### 6.10.2.2 `HostSocket::HostSocket ( Uint16 port ) [explicit]`

Definition at line 191 of file Net.cpp.

### 6.10.3 Member Function Documentation

#### 6.10.3.1 `bool HostSocket::Accept ( ClientSocket & the_client_socket )`

Definition at line 213 of file Net.cpp.

#### 6.10.3.2 `void HostSocket::OnReady ( ) [virtual]`

Reimplemented from **TcpSocket** (p. 62).

Definition at line 226 of file Net.cpp.

The documentation for this class was generated from the following files:

- header/**Net.hpp**
- source/**Net.cpp**

## 6.11 ImageAsset Struct Reference

**ImageAsset** (p. 36) A structure which contains all necessary data of an image.

```
#include <Asset.hpp>
```

### Public Attributes

- `std::string fileName = "none"`
- `std::string textureID = "none"`
- `std::string viewportID = "none"`
- `SDL_Rect destRect = {0}`
- `SDL_Rect srcRect = {0}`
- `double angle = 0.0d`
- `SDL_Point center = {0}`
- `FLIP sdIFlip = FLIP::NONE`

### 6.11.1 Detailed Description

**ImageAsset** (p. 36) A structure which contains all necessary data of an image.

Definition at line 32 of file Asset.hpp.

### 6.11.2 Member Data Documentation

#### 6.11.2.1 `double ImageAsset::angle = 0.0d`

Definition at line 39 of file Asset.hpp.

#### 6.11.2.2 `SDL_Point ImageAsset::center = {0}`

Definition at line 40 of file Asset.hpp.

#### 6.11.2.3 `SDL_Rect ImageAsset::destRect = {0}`

Definition at line 37 of file Asset.hpp.

#### 6.11.2.4 `std::string ImageAsset::fileName = "none"`

Definition at line 34 of file Asset.hpp.

#### 6.11.2.5 `FLIP ImageAsset::sdlFlip = FLIP::NONE`

Definition at line 41 of file Asset.hpp.

#### 6.11.2.6 `SDL_Rect ImageAsset::srcRect = {0}`

Definition at line 38 of file Asset.hpp.

#### 6.11.2.7 `std::string ImageAsset::textureID = "none"`

Definition at line 35 of file Asset.hpp.

#### 6.11.2.8 `std::string ImageAsset::viewportID = "none"`

Definition at line 36 of file Asset.hpp.

The documentation for this struct was generated from the following file:

- header/**Asset.hpp**

## 6.12 InputManager Class Reference

```
#include <InputManager.hpp>
```

### Public Member Functions

- void **initializeJoysticks** ()  
*initialiseJoysticks Initialises joysticks if any connected*
- const bool & **joysticksInitialised** () const  
*joystickInitialised Returns true if joysticks connected, false if not*
- void **reset** ()  
*reset Resets the mouse button state to false*
- bool **isKeyTriggered** (const SDL\_Scancode keyCode)  
*isKeyTriggered Checks if a certain key was triggered*
- bool **isKeyPressed** (const SDL\_Scancode keycode) const  
*isKeyPressed Checks if a certain key was pressed*
- bool **isKeyReleased** (const SDL\_Scancode keyCode) const  
*isKeyReleased Checks if a certain key is released*
- int **getAxisX** (int joy, int stick) const  
*getXAxis Returns the x axis value of the given stick*
- int **getAxisY** (int joy, int stick) const  
*getYAxis Returns the y axis value of the given stick*
- const bool **getButtonState** (int joy, int buttonNumber) const  
*getButtonState Returns the button state of a joystick button*
- const bool **getMouseButtonState** (**mouse\_buttons** mouseButton) const  
*getMouseButtonState Returns if a given mouse button was pressed*
- **Vector2D** \* **getMousePosition** () const  
*getMousePosition Returns a **Vector2D** (p. 78) with the mouse position*
- void **update** ()  
*update Updates the inputs*

### Static Public Member Functions

- static **InputManager** \* **Instance** ()  
*Instance Access to the input manager singleton.*

#### 6.12.1 Detailed Description

Definition at line 25 of file InputManager.hpp.

#### 6.12.2 Member Function Documentation

##### 6.12.2.1 int InputManager::getAxisX ( int joy, int stick ) const

getXAxis Returns the x axis value of the given stick

Definition at line 146 of file InputManager.cpp.



#### 6.12.2.2 `int InputManager::getAxisY ( int joy, int stick ) const`

getYAxis Returns the y axis value of the given stick

Definition at line 166 of file InputManager.cpp.

#### 6.12.2.3 `const bool InputManager::getButtonState ( int joy, int buttonNumber ) const` `[inline]`

getButtonState Returns the button state of a joystick button

Definition at line 107 of file InputManager.hpp.

#### 6.12.2.4 `const bool InputManager::getMouseButtonState ( mouse_buttons mouseButton ) const` `[inline]`

getMouseButtonState Returns if a given mouse button was pressed

Definition at line 115 of file InputManager.hpp.

#### 6.12.2.5 `Vector2D* InputManager::getMousePosition ( ) const` `[inline]`

getMousePosition Returns a **Vector2D** (p. 78) with the mouse position

See also

**Vector2D** (p. 78)

Definition at line 123 of file InputManager.hpp.

#### 6.12.2.6 `void InputManager::initializeJoysticks ( )`

initialiseJoysticks Initialises joysticks if any connected

Definition at line 43 of file InputManager.cpp.

#### 6.12.2.7 `static InputManager* InputManager::Instance ( )` `[inline],[static]`

Instance Access to the input manager singleton.

Definition at line 34 of file InputManager.hpp.

#### 6.12.2.8 `bool InputManager::isKeyPressed ( const SDL_Scancode keycode ) const`

isKeyPressed Checks if a certain key was pressed

Definition at line 125 of file InputManager.cpp.

#### 6.12.2.9 bool InputManager::isKeyReleased ( const SDL\_Scancode *keyCode* ) const

isKeyReleased Checks if a certain key is released

Definition at line 135 of file InputManager.cpp.

#### 6.12.2.10 bool InputManager::isKeyTriggered ( const SDL\_Scancode *keyCode* )

isKeyTriggered Checks if a certain key was triggered

Definition at line 111 of file InputManager.cpp.

#### 6.12.2.11 const bool& InputManager::joysticksInitialised ( ) const [inline]

joystickInitialised Returns true if joysticks connected, false if not

Definition at line 55 of file InputManager.hpp.

#### 6.12.2.12 void InputManager::reset ( )

reset Resets the mouse button state to false

Definition at line 103 of file InputManager.cpp.

#### 6.12.2.13 void InputManager::update ( )

update Updates the inputs

Definition at line 185 of file InputManager.cpp.

The documentation for this class was generated from the following files:

- header/**InputManager.hpp**
- source/**InputManager.cpp**

## 6.13 Logfile Class Reference

```
#include <Logfile.hpp>
```

### Public Member Functions

- void **createLogfile** (std::string filename)  
*Creates the logfile for the application Creates the logfile so it can be used throughout the application.*
- void **Textout** (std::string category, std::string key, std::string value)  
*Textout for writing in the logfile Writes some text in the logfile, see parameters.*
- void **quitLogging** ()  
*quitLogging closes the logging file Closes the logging file, no data is written*

## Static Public Member Functions

- static **Logfile** \* **Instance** ( )

*Static Instance Funtion to access the **Logfile** (p. 40) Instance This function is the access for all the logfile functions.*

### 6.13.1 Detailed Description

Definition at line 12 of file Logfile.hpp.

### 6.13.2 Member Function Documentation

#### 6.13.2.1 void Logfile::createLogfile ( std::string *filename* )

Creates the logfile for the application Creates the logfile so it can be used throughout the application.

##### Parameters

<i>filename</i>	as a std::string type value
-----------------	-----------------------------

##### Returns

void

Definition at line 21 of file Logfile.cpp.

#### 6.13.2.2 static **Logfile**\* **Logfile::Instance** ( ) [inline],[static]

Static Instance Funtion to access the **Logfile** (p. 40) Instance This function is the access for all the logfile functions.

##### Parameters

No	parameters need to call it
----	----------------------------

##### Returns

Return parameter is a pointer to the logfile instance

Definition at line 23 of file Logfile.hpp.

#### 6.13.2.3 void Logfile::quitLogging ( )

quitLogging closes the logging file Closes the logging file, no data is written

## Parameters

<i>no</i>	params
-----------	--------

## Returns

void

Definition at line 56 of file Logfile.cpp.

#### 6.13.2.4 void Logfile::Textout ( std::string *category*, std::string *key*, std::string *value* )

Textout for writing in the logfile Writes some text in the logfile, see parameters.

## Parameters

<i>std::string</i>	key where comes the report from
<i>std::string</i>	value some kind of information
<i>bool</i>	withTime false by default, true if time is necessary information

## Returns

void

Textout writes some information to the logfile Writes information to the logfile

## Parameters

<i>std::string</i>	category
<i>std::string</i>	key
<i>std::string</i>	value

## Returns

void

Definition at line 51 of file Logfile.cpp.

The documentation for this class was generated from the following files:

- header/**Logfile.hpp**
- source/**Logfile.cpp**

## 6.14 MenuButton Class Reference

```
#include <MenuButton.hpp>
```

Inherits **GameObject**.

## Public Member Functions

- **MenuButton** ()  
*Standard ctor Initialises the members with standard values.*
- **MenuButton** (**Button** values)  
*Explicit ctor Initialies an **MenuButton** (p. 42) object using a struct object.*
- **~MenuButton** ()  
*Dtor Frees the memory used by the button.*
- void **draw** ()  
*Draw method Derived draw method will draw the button to the screen.*
- void **update** ()  
*Update method Derived update method will update the button.*

## Additional Inherited Members

### 6.14.1 Detailed Description

Definition at line 35 of file MenuButton.hpp.

### 6.14.2 Constructor & Destructor Documentation

#### 6.14.2.1 MenuButton::MenuButton ( )

Standard ctor Initialises the members with standard values.

Definition at line 5 of file MenuButton.cpp.

#### 6.14.2.2 MenuButton::MenuButton ( **Button** values ) [explicit]

Explicit ctor Initialies an **MenuButton** (p. 42) object using a struct object.

Definition at line 10 of file MenuButton.cpp.

#### 6.14.2.3 MenuButton::~~MenuButton ( )

Dtor Frees the memory used by the button.

Definition at line 44 of file MenuButton.cpp.

### 6.14.3 Member Function Documentation

#### 6.14.3.1 void MenuButton::draw ( ) [virtual]

Draw method Derived draw method will draw the button to the screen.

Implements **GameObject** (p. 23).

Definition at line 48 of file MenuButton.cpp.

#### 6.14.3.2 void MenuButton::update ( ) [virtual]

Update method Derived update method will update the button.

Implements **GameObject** (p. 24).

Definition at line 55 of file MenuButton.cpp.

The documentation for this class was generated from the following files:

- header/**MenuButton.hpp**
- source/**MenuButton.cpp**

## 6.15 MenuState Class Reference

```
#include <MenuState.hpp>
```

Inherits **GameState**.

### Public Member Functions

- **MenuState (GameStateMachine &stateMachine)**  
*Explicit state constructor Creates a state.*
- bool **update ()**  
*Update of the State Creates a setting state.*
- void **render ()**  
*Render the State Renders the state to the screen.*
- bool **handleEvents ()**  
*Handle events of the State Handles all events in the state.*
- bool **onEnter** (std::string fileName)  
*OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...*
- bool **onExit** ()  
*OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...*

### Additional Inherited Members

#### 6.15.1 Detailed Description

Definition at line 12 of file MenuState.hpp.

#### 6.15.2 Constructor & Destructor Documentation

##### 6.15.2.1 MenuState::MenuState ( GameStateMachine & stateMachine ) [explicit]

Explicit state constructor Creates a state.

## Parameters

<i>reference</i>	to the <b>GameStateMachine</b> (p. 33)
------------------	--

Definition at line 8 of file MenuState.cpp.

### 6.15.3 Member Function Documentation

#### 6.15.3.1 bool MenuState::handleEvents ( ) [virtual]

Handle events of the State Handles all events in the state.

## Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 24 of file MenuState.cpp.

#### 6.15.3.2 bool MenuState::onEnter ( std::string fileName ) [virtual]

OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Parameters

<i>fileName</i>	contains the filename with the data
-----------------	-------------------------------------

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 30 of file MenuState.cpp.

#### 6.15.3.3 bool MenuState::onExit ( ) [virtual]

OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 51 of file MenuState.cpp.

#### 6.15.3.4 void MenuState::render ( ) [virtual]

Render the State Renders the state to the screen.

Reimplemented from **GameState** (p. 30).

Definition at line 19 of file MenuState.cpp.

#### 6.15.3.5 bool MenuState::update ( ) [virtual]

Update of the State Creates a setting state.

##### Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 30).

Definition at line 13 of file MenuState.cpp.

The documentation for this class was generated from the following files:

- header/**MenuState.hpp**
- source/**MenuState.cpp**

## 6.16 Net Class Reference

```
#include <Net.hpp>
```

### Static Public Member Functions

- static bool **Init** ( )
- static void **Quit** ( )

#### 6.16.1 Detailed Description

Definition at line 14 of file Net.hpp.

#### 6.16.2 Member Function Documentation

##### 6.16.2.1 bool Net::Init ( ) [static]

Definition at line 3 of file Net.cpp.



### 6.16.2.2 void Net::Quit ( ) [static]

Definition at line 14 of file Net.cpp.

The documentation for this class was generated from the following files:

- header/**Net.hpp**
- source/**Net.cpp**

## 6.17 NetMessage Class Reference

```
#include <Net.hpp>
```

### Public Member Functions

- **NetMessage** ()
- virtual int **NumToLoad** ()
- virtual int **NumToUnLoad** ()
- void **LoadBytes** (**charbuf** &inputbuffer, int n)
- void **UnLoadBytes** (**charbuf** &destbuffer)
- void **finish** ()

### Protected Types

- enum **bufstates** { **EMPTY**, **READING**, **WRITING**, **FULL** }

### Protected Member Functions

- void **reset** ()

### Protected Attributes

- **charbuf** buffer
- **bufstates** state

### 6.17.1 Detailed Description

Definition at line 23 of file Net.hpp.

## 6.17.2 Member Enumeration Documentation

### 6.17.2.1 enum `NetMessage::bufstates` `[protected]`

Enumerator

***EMPTY***

***READING***

***WRITING***

***FULL***

Definition at line 48 of file `Net.hpp`.

## 6.17.3 Constructor & Destructor Documentation

### 6.17.3.1 `NetMessage::NetMessage ( )`

Definition at line 19 of file `Net.cpp`.

## 6.17.4 Member Function Documentation

### 6.17.4.1 `void NetMessage::finish ( )`

Definition at line 32 of file `Net.cpp`.

### 6.17.4.2 `void NetMessage::LoadBytes ( charbuf & inputbuffer, int n )`

Definition at line 54 of file `Net.cpp`.

### 6.17.4.3 `int NetMessage::NumToLoad ( )` `[virtual]`

Definition at line 38 of file `Net.cpp`.

### 6.17.4.4 `int NetMessage::NumToUnLoad ( )` `[virtual]`

Definition at line 46 of file `Net.cpp`.

### 6.17.4.5 `void NetMessage::reset ( )` `[protected]`

Definition at line 24 of file `Net.cpp`.

## 6.17.4.6 void NetMessage::UnLoadBytes ( charbuf &amp; destbuffer )

Definition at line 62 of file Net.cpp.

## 6.17.5 Member Data Documentation

## 6.17.5.1 charbuf NetMessage::buffer [protected]

Definition at line 46 of file Net.hpp.

## 6.17.5.2 bufstates NetMessage::state [protected]

Definition at line 50 of file Net.hpp.

The documentation for this class was generated from the following files:

- header/**Net.hpp**
- source/**Net.cpp**

## 6.18 PauseState Class Reference

```
#include <PauseState.hpp>
```

Inherits **GameState**.

## Public Member Functions

- **PauseState** (**GameStateMachine** &stateMachine)  
*Explicit state constructor Creates a state.*
- bool **update** ()  
*Update of the State Creates a setting state.*
- void **render** ()  
*Render the State Renders the state to the screen.*
- bool **handleEvents** ()  
*Handle events of the State Handles all events in the state.*
- bool **onEnter** (std::string fileName)  
*OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...*
- bool **onExit** ()  
*OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...*

## Additional Inherited Members

## 6.18.1 Detailed Description

Definition at line 12 of file PauseState.hpp.

## 6.18.2 Constructor &amp; Destructor Documentation

## 6.18.2.1 PauseState::PauseState ( GameStateMachine &amp; stateMachine ) [explicit]

Explicit state constructor Creates a state.

## Parameters

<i>reference</i>	to the <b>GameStateMachine</b> (p. 33)
------------------	--

Definition at line 8 of file PauseState.cpp.

### 6.18.3 Member Function Documentation

#### 6.18.3.1 `bool PauseState::handleEvents ( ) [virtual]`

Handle events of the State Handles all events in the state.

## Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 24 of file PauseState.cpp.

#### 6.18.3.2 `bool PauseState::onEnter ( std::string fileName ) [virtual]`

OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Parameters

<i>fileName</i>	contains the filename with the data
-----------------	-------------------------------------

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 30 of file PauseState.cpp.

#### 6.18.3.3 `bool PauseState::onExit ( ) [virtual]`

OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 47 of file PauseState.cpp.

**6.18.3.4 void PauseState::render ( ) [virtual]**

Render the State Renders the state to the screen.

Reimplemented from **GameState** (p. 30).

Definition at line 19 of file PauseState.cpp.

**6.18.3.5 bool PauseState::update ( ) [virtual]**

Update of the State Creates a setting state.

**Returns**

true if update was successful, false if not

Reimplemented from **GameState** (p. 30).

Definition at line 13 of file PauseState.cpp.

The documentation for this class was generated from the following files:

- header/**PauseState.hpp**
- source/**PauseState.cpp**

**6.19 PlayState Class Reference**

```
#include <PlayState.hpp>
```

Inherits **GameState**.

**Public Member Functions**

- **PlayState (GameStateMachine &stateMachine)**  
*Explicit state constructor Creates a state.*
- bool **update ()**  
*Update of the State Creates a setting state.*
- void **render ()**  
*Render the State Renders the state to the screen.*
- bool **handleEvents ()**  
*Handle events of the State Handles all events in the state.*
- bool **onEnter** (std::string fileName)  
*OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...*
- bool **onExit ()**  
*OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...*

**Additional Inherited Members****6.19.1 Detailed Description**

Definition at line 12 of file PlayState.hpp.

**6.19.2 Constructor & Destructor Documentation****6.19.2.1 PlayState::PlayState ( GameStateMachine & stateMachine ) [explicit]**

Explicit state constructor Creates a state.

#### Parameters

<i>reference</i>	to the <b>GameStateMachine</b> (p. 33)
------------------	--

Definition at line 9 of file PlayState.cpp.

### 6.19.3 Member Function Documentation

#### 6.19.3.1 `bool PlayState::handleEvents ( ) [virtual]`

Handle events of the State Handles all events in the state.

#### Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 25 of file PlayState.cpp.

#### 6.19.3.2 `bool PlayState::onEnter ( std::string fileName ) [virtual]`

OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...

#### Parameters

<i>fileName</i>	contains the filename with the data
-----------------	-------------------------------------

#### Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 31 of file PlayState.cpp.

#### 6.19.3.3 `bool PlayState::onExit ( ) [virtual]`

OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...

#### Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 53 of file PlayState.cpp.

**6.19.3.4 void PlayState::render ( ) [virtual]**

Render the State Renders the state to the screen.

Reimplemented from **GameState** (p. 30).

Definition at line 20 of file PlayState.cpp.

**6.19.3.5 bool PlayState::update ( ) [virtual]**

Update of the State Creates a setting state.

**Returns**

true if update was successful, false if not

Reimplemented from **GameState** (p. 30).

Definition at line 14 of file PlayState.cpp.

The documentation for this class was generated from the following files:

- header/**PlayState.hpp**
- source/**PlayState.cpp**

**6.20 SettingState Class Reference**

```
#include <SettingState.hpp>
```

Inherits **GameState**.

**Public Member Functions**

- **SettingState (GameStateMachine &stateMachine)**  
*Explicit state constructor Creates a state.*
- bool **update ()**  
*Update of the State Creates a setting state.*
- void **render ()**  
*Render the State Renders the state to the screen.*
- bool **handleEvents ()**  
*Handle events of the State Handles all events in the state.*
- bool **onEnter** (std::string fileName)  
*OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...*
- bool **onExit ()**  
*OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...*

**Additional Inherited Members****6.20.1 Detailed Description**

Definition at line 12 of file SettingState.hpp.

**6.20.2 Constructor & Destructor Documentation****6.20.2.1 SettingState::SettingState ( GameStateMachine & stateMachine ) [explicit]**

Explicit state constructor Creates a state.

## Parameters

<i>reference</i>	to the <b>GameStateMachine</b> (p. 33)
------------------	--

Definition at line 3 of file SettingState.cpp.

### 6.20.3 Member Function Documentation

#### 6.20.3.1 `bool SettingState::handleEvents ( ) [virtual]`

Handle events of the State Handles all events in the state.

## Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 18 of file SettingState.cpp.

#### 6.20.3.2 `bool SettingState::onEnter ( std::string fileName ) [virtual]`

OnEnter Loads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Parameters

<i>fileName</i>	contains the filename with the data
-----------------	-------------------------------------

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 23 of file SettingState.cpp.

#### 6.20.3.3 `bool SettingState::onExit ( ) [virtual]`

OnExit Unloads all resources necessary for the state: Assets, music, sound, ttf, etc...

## Returns

true if loading was successful, false if not

Reimplemented from **GameState** (p. 29).

Definition at line 74 of file SettingState.cpp.



## 6.20.3.4 void SettingState::render ( ) [virtual]

Render the State Renders the state to the screen.

Reimplemented from **GameState** (p. 30).

Definition at line 13 of file SettingState.cpp.

## 6.20.3.5 bool SettingState::update ( ) [virtual]

Update of the State Creates a setting state.

## Returns

true if update was successful, false if not

Reimplemented from **GameState** (p. 30).

Definition at line 8 of file SettingState.cpp.

The documentation for this class was generated from the following files:

- header/**SettingState.hpp**
- source/**SettingState.cpp**

## 6.21 SoundManager Class Reference

```
#include <SoundManager.hpp>
```

### Public Member Functions

- bool **init** (int flags, unsigned freq, Uint16 format, unsigned channels, unsigned chunksize)  
*init Initialises the sound manager with some parameters*
- bool **load** (std::string fileName, std::string soundID, **SoundType** soundType)  
*load Loads a SFX or a music file*
- void **playSound** (std::string soundID, int loop)  
*playSound Plays a certain sound*
- void **playMusic** (std::string musicID, int loop)  
*playMusic Plays a certain music*
- void **pauseMusic** ()  
*pauseMusic Pauses music if some is played*
- void **resumeMusic** ()  
*resumeMusic Resumes music if it has been paused before*
- void **haltMusic** ()  
*stopMusic Stops music if it has been paused before*
- bool **isMusicPlaying** ()  
*isMusicPlaying Returns true if music is playing or not*
- bool **isMusicPaused** ()  
*isMusicPaused Returns true if music is paused or not*
- void **removeSFX** (std::string sfxID)  
*removeSFX Removes a SFX sound from the map*
- void **removeMusic** (std::string musicID)  
*removeMusic Removes a music sound from the map*
- void **freeMemory** ()  
*freeMemory Frees the memory used by the **SoundManager** (p. 55)*

## Static Public Member Functions

- static **SoundManager** \* **Instance** ()

*Instance* Returns an instance pointer to the **SoundManager** (p. 55).

### 6.21.1 Detailed Description

Definition at line 23 of file SoundManager.hpp.

### 6.21.2 Member Function Documentation

#### 6.21.2.1 void SoundManager::freeMemory ( ) [inline]

**freeMemory** Frees the memory used by the **SoundManager** (p. 55)

##### Parameters

<i>no</i>	params needed
-----------	---------------

Definition at line 148 of file SoundManager.hpp.

#### 6.21.2.2 void SoundManager::haltMusic ( )

**stopMusic** Stops music if it has been paused before

##### Parameters

<i>no</i>	params needed
-----------	---------------

Definition at line 122 of file SoundManager.cpp.

#### 6.21.2.3 bool SoundManager::init ( int *flags*, unsigned *freq*, Uint16 *format*, unsigned *channels*, unsigned *chunksize* )

**init** Initialises the sound manager with some parameters

##### Parameters

<i>flags</i>	for different file formats like mp3, wav and such
<i>freq</i>	
<i>format</i>	
<i>channels</i>	
<i>chunksize</i>	

Definition at line 34 of file SoundManager.cpp.

#### 6.21.2.4 static SoundManager\* SoundManager::Instance ( ) [inline],[static]

Instance Returns an instance pointer to the **SoundManager** (p. 55).

Definition at line 32 of file SoundManager.hpp.

#### 6.21.2.5 bool SoundManager::isMusicPaused ( ) [inline]

isMusicPaused Returns true if music is paused or not

##### Parameters

<i>no</i>	params needed
-----------	---------------

Definition at line 122 of file SoundManager.hpp.

#### 6.21.2.6 bool SoundManager::isMusicPlaying ( ) [inline]

isMusicPlaying Returns true if music is playing or not

##### Parameters

<i>no</i>	params needed
-----------	---------------

Definition at line 114 of file SoundManager.hpp.

#### 6.21.2.7 bool SoundManager::load ( std::string fileName, std::string soundID, SoundType soundType )

load Loads a SFX or a music file

##### Parameters

<i>filename</i>	necessary for which file will be loaded
<i>soundID</i>	how the loaded sound will be named
<i>SoundType</i>	which type of sound is it: SFX or music?

Definition at line 54 of file SoundManager.cpp.

#### 6.21.2.8 void SoundManager::pauseMusic ( )

pauseMusic Pauses music if some is played

##### Parameters

<i>no</i>	params needed
-----------	---------------

Definition at line 108 of file SoundManager.cpp.

#### 6.21.2.9 void SoundManager::playMusic ( std::string *musicID*, int *loop* )

playMusic Plays a certain music

##### Parameters

<i>soundID</i>	which sound will be played
<i>loop</i>	how many times will the sound be played

Definition at line 101 of file SoundManager.cpp.

#### 6.21.2.10 void SoundManager::playSound ( std::string *soundID*, int *loop* )

playSound Plays a certain sound

##### Parameters

<i>soundID</i>	which sound will be played
<i>loop</i>	how many times will the sound be played

Definition at line 95 of file SoundManager.cpp.

#### 6.21.2.11 void SoundManager::removeMusic ( std::string *musicID* )

removeMusic Removes a music sound from the map

##### Parameters

<i>music</i>	which is the name of the music to be removed
--------------	--

Definition at line 136 of file SoundManager.cpp.

#### 6.21.2.12 void SoundManager::removeSFX ( std::string *sfxID* )

removeSFX Removes a SFX sound from the map

##### Parameters

<i>sfxID</i>	which is the name of the sound to be removed
--------------	--

Definition at line 129 of file SoundManager.cpp.

## 6.21.2.13 void SoundManager::resumeMusic ( )

resumeMusic Resumes music if it has been paused before

## Parameters

<i>no</i>	params needed
-----------	---------------

Definition at line 115 of file SoundManager.cpp.

The documentation for this class was generated from the following files:

- header/**SoundManager.hpp**
- source/**SoundManager.cpp**

## 6.22 SystemTime Class Reference

```
#include <SystemTime.hpp>
```

### Public Member Functions

- std::string **getDate** ()  
*getDate()* (p. 60) Get the current date
- std::string **getTime** ()  
*getTime()* (p. 60) Get the current time
- std::string **getDateTime** ()  
*getDateTime()* (p. 60) Get the current date and time
- std::string **getASCTime** ()  
*getASCTime()* (p. 60) Get the current date in american format
- void **startTimer** ()  
*startTimer()* (p. 61) Starts the timer
- void **endTimer** ()  
*endTimer()* (p. 60) Get the current date
- std::string **getTimerValue** ()  
*getTimerValue()* (p. 61) Get the timer value

### Static Public Member Functions

- static **SystemTime \* Instance** ()  
*Instance of SystemTime* (p. 59) Get the **SystemTime** (p. 59) instance.

### 6.22.1 Detailed Description

Definition at line 14 of file SystemTime.hpp.

## 6.22.2 Member Function Documentation

### 6.22.2.1 void SystemTime::endTimer ( )

**endTimer()** (p. 60) Get the current date

**Returns**

string with current date

Definition at line 83 of file SystemTime.cpp.

### 6.22.2.2 std::string SystemTime::getASCTime ( )

**getASCTime()** (p. 60) Get the current date in american format

**Returns**

string with current date

Definition at line 63 of file SystemTime.cpp.

### 6.22.2.3 std::string SystemTime::getDate ( )

**getDate()** (p. 60) Get the current date

**Returns**

string with current date

Definition at line 16 of file SystemTime.cpp.

### 6.22.2.4 std::string SystemTime::getDateTime ( )

**getDateTime()** (p. 60) Get the current date and time

**Returns**

string with current date and time

Definition at line 47 of file SystemTime.cpp.

### 6.22.2.5 std::string SystemTime::getTime ( )

**getTime()** (p. 60) Get the current time

**Returns**

string with current time

Definition at line 31 of file SystemTime.cpp.

6.22.2.6 `std::string SystemTime::getTimerValue ( )`

**getTimerValue()** (p. 61) Get the timer value

## Returns

string with timer value in milliseconds

Definition at line 89 of file SystemTime.cpp.

6.22.2.7 `static SystemTime* SystemTime::Instance ( ) [inline], [static]`

Instance of **SystemTime** (p. 59) Get the **SystemTime** (p. 59) instance.

Definition at line 23 of file SystemTime.hpp.

6.22.2.8 `void SystemTime::startTimer ( )`

**startTimer()** (p. 61) Starts the timer

## Returns

void

Definition at line 77 of file SystemTime.cpp.

The documentation for this class was generated from the following files:

- header/**SystemTime.hpp**
- source/**SystemTime.cpp**

## 6.23 TcpSocket Class Reference

```
#include <Net.hpp>
```

Inherited by **ClientSocket**, and **HostSocket**.

### Public Member Functions

- **TcpSocket** ()
- virtual **~TcpSocket** ()
- virtual void **SetSocket** (TCPsocket the\_sdl\_socket)
- bool **Ok** () const
- bool **Ready** () const
- virtual void **OnReady** ()

## Protected Attributes

- TCPsocket **m\_Socket**
- SDLNet\_SocketSet **set**

### 6.23.1 Detailed Description

Definition at line 83 of file Net.hpp.

### 6.23.2 Constructor & Destructor Documentation

#### 6.23.2.1 TcpSocket::TcpSocket ( )

Definition at line 122 of file Net.cpp.

#### 6.23.2.2 TcpSocket::~~TcpSocket ( ) [virtual]

Definition at line 128 of file Net.cpp.

### 6.23.3 Member Function Documentation

#### 6.23.3.1 bool TcpSocket::Ok ( ) const

Definition at line 155 of file Net.cpp.

#### 6.23.3.2 void TcpSocket::OnReady ( ) [virtual]

Reimplemented in **ClientSocket** (p. 19), and **HostSocket** (p. 36).

Definition at line 173 of file Net.cpp.

#### 6.23.3.3 bool TcpSocket::Ready ( ) const

Definition at line 160 of file Net.cpp.

#### 6.23.3.4 void TcpSocket::SetSocket ( TCPsocket *the\_sdl\_socket* ) [virtual]

Reimplemented in **ClientSocket** (p. 19).

Definition at line 138 of file Net.cpp.



### 6.23.4 Member Data Documentation

#### 6.23.4.1 TCPsocket TcpSocket::m\_Socket [protected]

Definition at line 101 of file Net.hpp.

#### 6.23.4.2 SDLNet\_SocketSet TcpSocket::set [protected]

Definition at line 103 of file Net.hpp.

The documentation for this class was generated from the following files:

- header/**Net.hpp**
- source/**Net.cpp**

## 6.24 TextAsset Struct Reference

**TextAsset** (p. 63) A structure which contains all necessary data of an text.

```
#include <Asset.hpp>
```

### Public Attributes

- std::string **text** = "none"
- std::string **fontName** = "none"
- std::string **textureID** = "none"
- std::string **viewportID** = "none"
- std::string **colorID** = "none"
- SDL\_Rect **destRect** = {0}
- SDL\_Rect **srcRect** = {0}
- double **angle** = 0.0d
- SDL\_Point **center** = {0}
- **FLIP** **sdIFlip** = **FLIP::NONE**
- **TEXTQUALITY** **textQuality** = **TEXTQUALITY::SOLID**

### 6.24.1 Detailed Description

**TextAsset** (p. 63) A structure which contains all necessary data of an text.

Definition at line 50 of file Asset.hpp.

### 6.24.2 Member Data Documentation

#### 6.24.2.1 double TextAsset::angle = 0.0d

Definition at line 59 of file Asset.hpp.

#### 6.24.2.2 **SDL\_Point** TextAsset::center = {0}

Definition at line 60 of file Asset.hpp.

#### 6.24.2.3 **std::string** TextAsset::colorID = "none"

Definition at line 56 of file Asset.hpp.

#### 6.24.2.4 **SDL\_Rect** TextAsset::destRect = {0}

Definition at line 57 of file Asset.hpp.

#### 6.24.2.5 **std::string** TextAsset::fontName = "none"

Definition at line 53 of file Asset.hpp.

#### 6.24.2.6 **FLIP** TextAsset::sdlFlip = **FLIP::NONE**

Definition at line 61 of file Asset.hpp.

#### 6.24.2.7 **SDL\_Rect** TextAsset::srcRect = {0}

Definition at line 58 of file Asset.hpp.

#### 6.24.2.8 **std::string** TextAsset::text = "none"

Definition at line 52 of file Asset.hpp.

#### 6.24.2.9 **TEXTQUALITY** TextAsset::textQuality = **TEXTQUALITY::SOLID**

Definition at line 62 of file Asset.hpp.

#### 6.24.2.10 **std::string** TextAsset::textureID = "none"

Definition at line 54 of file Asset.hpp.

#### 6.24.2.11 **std::string** TextAsset::viewportID = "none"

Definition at line 55 of file Asset.hpp.

The documentation for this struct was generated from the following file:

- header/**Asset.hpp**

## 6.25 Texture Class Reference

```
#include <Texture.hpp>
```

### Public Member Functions

- **Texture** ()  
*Texture* (p. 65) Constructor for a texture.
- **~Texture** ()  
*SoundType* Destructor for a texture.
- void **free** ()  
*free* frees the memory used by the texture
- bool **loadFromFile** (std::string path, bool colorKeying=false, SDL\_Color colorKey={0, 255, 255, 255})  
*loadFromFile* Loads a texture from a path
- bool **loadFromRenderedText** (TTF\_Font \*font, std::string text, SDL\_Color textColor, **TextQuality** text↔Quality=TextQuality::SOLID)  
*loadFromRenderedText* Loads a font from a path
- void **setColor** (SDL\_Color color)  
*setColor* Modulates the color of a the texture
- void **setBlendMode** (SDL\_BlendMode blending)  
*setColor* Modulates the color of a the texture
- void **setAlpha** (Uint8 alpha)  
*setColor* Modulates the color of a the texture
- void **render** (int x, int y, SDL\_Rect \*clip=nullptr, SDL\_Rect viewport={0}, double angle=0.d, SDL\_Point \*center=nullptr, SDL\_RendererFlip flip=SDL\_FLIP\_NONE)  
*render* The textures render function
- const int & **getHeight** () const  
*render* Returns the height of the texture
- const int & **getWidth** () const  
*render* Returns the width of the texture

### 6.25.1 Detailed Description

Definition at line 25 of file Texture.hpp.

### 6.25.2 Constructor & Destructor Documentation

#### 6.25.2.1 Texture::Texture ( )

**Texture** (p. 65) Constructor for a texture.

Definition at line 6 of file Texture.cpp.

#### 6.25.2.2 Texture::~~Texture ( )

*SoundType* Destructor for a texture.

Definition at line 14 of file Texture.cpp.

### 6.25.3 Member Function Documentation

#### 6.25.3.1 void Texture::free ( )

free frees the memory used by the texture

Definition at line 21 of file Texture.cpp.

#### 6.25.3.2 const int& Texture::getHeight ( ) const [inline]

render Returns the height of the texture

Definition at line 120 of file Texture.hpp.

#### 6.25.3.3 const int& Texture::getWidth ( ) const [inline]

render Returns the width of the texture

Definition at line 127 of file Texture.hpp.

#### 6.25.3.4 bool Texture::loadFromFile ( std::string path, bool colorKeying = false, SDL\_Color colorKey = { 0, 255, 255, 255 } )

loadFromFile Loads a texture from a path

##### Parameters

<i>path</i>	to the file with the resource
<i>colorKeying</i>	by standard false, deletes a color while drawing the texture
<i>colorKey</i>	the a, r, g and b color values used by colorKeying

Definition at line 34 of file Texture.cpp.

#### 6.25.3.5 bool Texture::loadFromRenderedText ( TTF\_Font \* font, std::string text, SDL\_Color textColor, TextQuality textQuality = TextQuality::SOLID )

loadFromRenderedText Loads a font from a path

##### Parameters

<i>font</i>	the ttf font which is used for the text
<i>text</i>	is the text which will be used
<i>textColor</i>	the color of the text
<i>TextQuality</i>	the quality of the text, standard is solid which means lowest possible

Definition at line 79 of file Texture.cpp.

**6.25.3.6** `void Texture::render ( int x, int y, SDL_Rect * clip = nullptr, SDL_Rect viewport = {0}, double angle = 0.d, SDL_Point * center = nullptr, SDL_RendererFlip flip = SDL_FLIP_NONE )`

render The textures render function

#### Parameters

<i>x</i>	the x coordinate of the upper left
<i>y</i>	the y coordinate of the upper left
<i>clip</i>	defines a part of the texture which will be rendered
<i>viewport</i>	the viewport for the texture
<i>angle</i>	in which angle the texture will be drawn
<i>center</i>	the center of the texture
<i>flip</i>	is the texture flipped: horizontal or vertical

Definition at line 152 of file Texture.cpp.

**6.25.3.7** `void Texture::setAlpha ( Uint8 alpha )`

setColor Modulates the color of a the texture

#### Parameters

<i>blending</i>	changes the alpha of the texture
-----------------	----------------------------------

Definition at line 145 of file Texture.cpp.

**6.25.3.8** `void Texture::setBlendMode ( SDL_BlendMode blending )`

setColor Modulates the color of a the texture

#### Parameters

<i>blending</i>	changes the blending of the texture
-----------------	-------------------------------------

Definition at line 138 of file Texture.cpp.

**6.25.3.9** `void Texture::setColor ( SDL_Color color )`

setColor Modulates the color of a the texture

#### Parameters

<i>color</i>	the new color of the texture
--------------	------------------------------

Definition at line 131 of file Texture.cpp.

The documentation for this class was generated from the following files:

- header/**Texture.hpp**
- source/**Texture.cpp**

## 6.26 TextureManager Class Reference

```
#include <TextureManager.hpp>
```

### Public Member Functions

- bool **initTextureManager** (int imgFlags)  
*initTextureManager* Inits the manager with the necessary file formats used in the application
- bool **loadColor** (std::string id, Uint8 r, Uint8 g, Uint8 **b**, Uint8 a)  
*loadColor* Loads a color and stores it for further use
- bool **loadFont** (std::string file, int pointSize, std::string id)  
*loadFont* Loads a font and stores it for further use
- bool **loadImageTexture** (std::string path, std::string textureID, bool colorKeying=false, std::string color←Key="cyan")  
*loadImageTexture* Loads a image in a texture and stores it for further use
- bool **loadTextTexture** (std::string fontID, std::string text, std::string colorID, std::string textureID, **TextQuality** textQuality=TextQuality::SOLID)  
*loadTextTexture* Loads a text in a texture and stores it for further use
- void **addViewport** (int x, int y, int w, int h, std::string keyOfViewport)  
*addViewport* Adds a viewport to the map for further use
- void **addViewport** (SDL\_Rect &viewport, std::string keyOfViewport)  
*addViewport* Adds a viewport to the map for further use
- SDL\_Rect & **getViewport** (std::string viewportID)  
*addViewport* Returns a viewport which was stored before
- bool **hasTexture** (std::string textureID)  
*hasTexture* Checks if a texture exists already
- void **setColorOfTexture** (std::string textureID, std::string colorID)  
*setColorOfTexture* Sets the color of a texture
- void **setBlendModeOfTexture** (std::string textureID, SDL\_BlendMode blending)  
*setBlendModeOfTexture* Sets the blending mode to NONE, ALPHA, ADD or MOD
- void **setAlphaOfTexture** (std::string textureID, Uint8 alpha)  
*setAlphaOfTexture* Changes the transparency of a texture
- const int **getHeightOfTexture** (std::string textureID)  
*getHeightOfTexture* Returns the height of the texture
- const int **getWidthOfTexture** (std::string textureID)  
*getWidthOfTexture* Returns the width of the texture
- void **drawTexture** (std::string textureID, int x, int y, SDL\_Rect \*clip=nullptr, std::string viewportID="screen", double angle=0, SDL\_Point \*center=nullptr, SDL\_RendererFlip flip=SDL\_FLIP\_NONE)  
*drawTexture* Draws a texture to the screen
- void **drawBox** (std::string viewportID, int x1, int x2, int y1, int y2, Uint8 r, Uint8 g, Uint8 **b**, Uint8 a)  
*drawBox* Draws a box to the screen
- void **drawCircle** (std::string viewportID, int x, int y, int radius, Uint8 r, Uint8 g, Uint8 **b**, Uint8 a)  
*drawCircle* Draws a circle to the screen

- void **drawEllipse** (std::string viewportID, int x, int y, int rx, int ry, Uint8 r, Uint8 g, Uint8 b, Uint8 a)  
*drawEllipse Draws an ellipse to the screen*
- void **removeTexture** (std::string id)  
*removeTexture Removes a texture from the manager*
- void **removeColor** (std::string id)  
*removeColor Removes a color from the manager*
- void **removeFont** (std::string id)  
*removeFont Removes a font from the manager*
- void **removeViewport** (std::string id)  
*removeViewport Removes a viewport from the manager*
- void **freeMemory** ()  
*freeMemory Frees the memory used by the **TextureManager** (p. 68)*

## Static Public Member Functions

- static **TextureManager \* Instance** ()  
*Instance Returns a singleton pointer to the texture manager.*

### 6.26.1 Detailed Description

Definition at line 16 of file TextureManager.hpp.

### 6.26.2 Member Function Documentation

#### 6.26.2.1 void TextureManager::addViewport ( int x, int y, int w, int h, std::string keyOfViewport )

addViewport Adds a viewport to the map for further use

##### Parameters

<i>x</i>	the upper left x coordinate
<i>y</i>	the upper left y coordinate
<i>w</i>	the width of the viewport
<i>h</i>	the height of the viewport
<i>keyOfViewport</i>	the name of the viewport for further use

Definition at line 160 of file TextureManager.cpp.

#### 6.26.2.2 void TextureManager::addViewport ( SDL\_Rect & viewport, std::string keyOfViewport )

addViewport Adds a viewport to the map for further use

##### Parameters

<i>viewport</i>	a sdl rectangle variable which contains x, y, w and h values
<i>keyOfViewport</i>	the name of the viewport for further use

Definition at line 149 of file TextureManager.cpp.

6.26.2.3 void TextureManager::drawBox ( std::string *viewportID*, int *x1*, int *x2*, int *y1*, int *y2*, Uint8 *r*, Uint8 *g*, Uint8 *b*, Uint8 *a* )

drawBox Draws a box to the screen

#### Parameters

<i>viewportID</i>	to which viewport will be drawn?
<i>x1</i>	left x coordinate of the box
<i>x2</i>	right x coordinate of the box
<i>y1</i>	upper y coordinate of the box
<i>y2</i>	lower y coordinate of the box
<i>r</i>	red part of the color, 0-255
<i>g</i>	green part of the color, 0-255
<i>b</i>	blue part of the color, 0-255
<i>a</i>	alpha of the color, how opaque it is, 0-255

Definition at line 210 of file TextureManager.cpp.

6.26.2.4 void TextureManager::drawCircle ( std::string *viewportID*, int *x*, int *y*, int *radius*, Uint8 *r*, Uint8 *g*, Uint8 *b*, Uint8 *a* )

drawCircle Draws a circle to the screen

#### Parameters

<i>viewportID</i>	to which viewport will be drawn?
<i>x</i>	coordinate of the center
<i>y</i>	coordinate of the center
<i>radius</i>	distance to the center
<i>r</i>	red part of the color, 0-255
<i>g</i>	green part of the color, 0-255
<i>b</i>	blue part of the color, 0-255
<i>a</i>	alpha of the color, how opaque it is, 0-255

Definition at line 217 of file TextureManager.cpp.

6.26.2.5 void TextureManager::drawEllipse ( std::string *viewportID*, int *x*, int *y*, int *rx*, int *ry*, Uint8 *r*, Uint8 *g*, Uint8 *b*, Uint8 *a* )

drawEllipse Draws an ellipse to the screen

#### Parameters

<i>viewportID</i>	to which viewport will be drawn?
<i>x</i>	coordinate of the center
<i>y</i>	coordinate of the center
<i>rx</i>	x distance to the center



## Parameters

<i>ry</i>	y distance to the center
<i>r</i>	red part of the color, 0-255
<i>g</i>	green part of the color, 0-255
<i>b</i>	blue part of the color, 0-255
<i>a</i>	alpha of the color, how opaque it is, 0-255

Definition at line 224 of file TextureManager.cpp.

**6.26.2.6** `void TextureManager::drawTexture ( std::string textureID, int x, int y, SDL_Rect * clip = nullptr, std::string viewportID = "screen", double angle = 0, SDL_Point * center = nullptr, SDL_RendererFlip flip = SDL_FLIP_NONE )`

drawTexture Draws a texture to the screen

## Parameters

<i>textureID</i>	the name of the texture
<i>x</i>	coordinate of upper left
<i>y</i>	coordinate of upper left
<i>clip</i>	part of the texture which will be drawn instead
<i>viewportID</i>	to which viewport will be drawn?
<i>angle</i>	of the texture
<i>center</i>	of the texture
<i>flip</i>	of the texture, HORIZONTAL or VERTICAL

Definition at line 204 of file TextureManager.cpp.

**6.26.2.7** `void TextureManager::freeMemory ( ) [inline]`

freeMemory Frees the memory used by the **TextureManager** (p. 68)

## Parameters

<i>no</i>	params needed
-----------	---------------

Definition at line 277 of file TextureManager.hpp.

**6.26.2.8** `const int TextureManager::getHeightOfTexture ( std::string textureID ) [inline]`

getHeightOfTexture Returns the height of the texture

## Parameters

<i>textureID</i>	the name of the texture
------------------	-------------------------

Definition at line 163 of file TextureManager.hpp.

#### 6.26.2.9 SDL\_Rect & TextureManager::getViewport ( std::string *viewportID* )

addViewport Returns a viewport which was stored before

##### Parameters

<i>viewportID</i>	the name of the viewport which will be looked for
-------------------	---

Definition at line 171 of file TextureManager.cpp.

#### 6.26.2.10 const int TextureManager::getWidthOfTexture ( std::string *textureID* ) [inline]

getWidthOfTexture Returns the width of the texture

##### Parameters

<i>textureID</i>	the name of the texture
------------------	-------------------------

Definition at line 171 of file TextureManager.hpp.

#### 6.26.2.11 bool TextureManager::hasTexture ( std::string *textureID* )

hasTexture Checks if a texture exists already

##### Parameters

<i>viewportID</i>	the name of the viewport which will be looked for
-------------------	---

Definition at line 177 of file TextureManager.cpp.

#### 6.26.2.12 bool TextureManager::initTextureManager ( int *imgFlags* )

initTextureManager Inits the manager with the necessary file formats used in the application

##### Parameters

<i>imgFlags</i>	used for the file formats
-----------------	---------------------------

Definition at line 42 of file TextureManager.cpp.

#### 6.26.2.13 static TextureManager\* TextureManager::Instance ( ) [inline],[static]

Instance Returns a singleton pointer to the texture manager.

Definition at line 25 of file TextureManager.hpp.

#### 6.26.2.14 bool TextureManager::loadColor ( std::string *id*, Uint8 *r*, Uint8 *g*, Uint8 *b*, Uint8 *a* )

loadColor Loads a color and stores it for further use

##### Parameters

<i>id</i>	name of the color
<i>r</i>	red part of the color 0-255
<i>g</i>	green part of the color 0-255
<i>b</i>	blue part of the color 0-255
<i>a</i>	alpha of the color 0-255

Definition at line 61 of file TextureManager.cpp.

#### 6.26.2.15 bool TextureManager::loadFont ( std::string *file*, int *pointSize*, std::string *id* )

loadFont Loads a font and stores it for further use

##### Parameters

<i>file</i>	path to the font file
<i>pointSize</i>	the size of the color
<i>id</i>	the id for further use

Definition at line 71 of file TextureManager.cpp.

#### 6.26.2.16 bool TextureManager::loadImageTexture ( std::string *path*, std::string *textureID*, bool *colorKeying* = false, std::string *colorKey* = "cyan" )

loadImageTexture Loads a image in a texture and stores it for further use

##### Parameters

<i>path</i>	to the font file
<i>textureID</i>	name of the texture for further use
<i>colorKeying</i>	is color keying used or not? standard false
<i>colorKey</i>	is the color which is used for color keying, standard is cyan

Definition at line 94 of file TextureManager.cpp.

#### 6.26.2.17 bool TextureManager::loadTextTexture ( std::string *fontID*, std::string *text*, std::string *colorID*, std::string *textureID*, TextQuality *textQuality* = TextQuality::SOLID )

loadTextTexture Loads a text in a texture and stores it for further use

## Parameters

<i>fontID</i>	name of the fontFile which is used for the text
<i>text</i>	the text which is rendered to the texture
<i>colorID</i>	the color which is used for the text
<i>textureID</i>	the name of the texture for further use
<i>TextQuality</i>	the quality of the text, SOLID = lowest, SHADED = medium, BLENDED = highest

Definition at line 125 of file TextureManager.cpp.

**6.26.2.18** void TextureManager::removeColor ( std::string *id* ) [inline]

removeColor Removes a color from the manager

## Parameters

<i>id</i>	name of the color which will be removed
-----------	---

Definition at line 252 of file TextureManager.hpp.

**6.26.2.19** void TextureManager::removeFont ( std::string *id* )

removeFont Removes a font from the manager

## Parameters

<i>id</i>	name of the font which will be removed
-----------	--

Definition at line 238 of file TextureManager.cpp.

**6.26.2.20** void TextureManager::removeTexture ( std::string *id* )

removeTexture Removes a texture from the manager

## Parameters

<i>id</i>	name of the texture which will be removed
-----------	---

Definition at line 231 of file TextureManager.cpp.

**6.26.2.21** void TextureManager::removeViewport ( std::string *id* ) [inline]

removeViewport Removes a viewport from the manager

## Parameters

<i>id</i>	name of the viewport which will be removed
-----------	--

Definition at line 268 of file TextureManager.hpp.

6.26.2.22 void TextureManager::setAlphaOfTexture ( std::string *textureID*, Uint8 *alpha* )

setAlphaOfTexture Changes the transparency of a texture

## Parameters

<i>textureID</i>	the name of the texture
<i>alpha</i>	the alpha of a texture, 0-255

Definition at line 198 of file TextureManager.cpp.

6.26.2.23 void TextureManager::setBlendModeOfTexture ( std::string *textureID*, SDL\_BlendMode *blending* )

setBlendModeOfTexture Sets the blending mode to NONE, ALPHA, ADD or MOD

## Parameters

<i>textureID</i>	the name of the texture
<i>blending</i>	the blending mode to NONE, ALPHA, ADD or MOD

Definition at line 192 of file TextureManager.cpp.

6.26.2.24 void TextureManager::setColorOfTexture ( std::string *textureID*, std::string *colorID* )

setColorOfTexture Sets the color of a texture

## Parameters

<i>textureID</i>	the name of the texture
<i>colorID</i>	the name of the color, must be loaded previously

Definition at line 186 of file TextureManager.cpp.

The documentation for this class was generated from the following files:

- header/**TextureManager.hpp**
- source/**TextureManager.cpp**

## 6.27 Timer Class Reference

```
#include <Timer.hpp>
```

## Public Member Functions

- **Timer** ()  
*Constructor Simple Constructor, initialises members.*
- void **start** ()  
*start Starts the timer by setting member variable to SDL\_GetTicks()*
- void **stop** ()  
*stop Stops the timer, resets the variables*
- void **pause** ()  
*pauses Pauses the timer*
- void **unpause** ()  
*pauses Unpauses the timer*
- Uint32 **getTicks** ()  
*getTicks How long the timer was running*
- const bool & **isStarted** () const  
*isStarted Is the timer started?*
- const bool **isPaused** () const  
*isPaused Is the timer started and paused*

### 6.27.1 Detailed Description

Definition at line 13 of file Timer.hpp.

### 6.27.2 Constructor & Destructor Documentation

#### 6.27.2.1 Timer::Timer ( )

Constructor Simple Constructor, initialises members.

Definition at line 4 of file Timer.cpp.

### 6.27.3 Member Function Documentation

#### 6.27.3.1 Uint32 Timer::getTicks ( )

getTicks How long the timer was running

#### Returns

ticks in milliseconds

Definition at line 62 of file Timer.cpp.

### 6.27.3.2 `const bool Timer::isPaused ( ) const [inline]`

isPaused Is the timer started and paused

#### Returns

boolean true if started and paused, false if not

Definition at line 77 of file Timer.hpp.

### 6.27.3.3 `const bool& Timer::isStarted ( ) const [inline]`

isStarted Is the timer started?

#### Returns

boolean true if started, false if not

Definition at line 69 of file Timer.hpp.

### 6.27.3.4 `void Timer::pause ( )`

pauses Pauses the timer

Definition at line 35 of file Timer.cpp.

### 6.27.3.5 `void Timer::start ( )`

start Starts the timer by setting member variable to `SDL_GetTicks()`

Definition at line 14 of file Timer.cpp.

### 6.27.3.6 `void Timer::stop ( )`

stop Stops the timer, resets the variables

Definition at line 25 of file Timer.cpp.

### 6.27.3.7 `void Timer::unpause ( )`

pauses Unpauses the timer

Definition at line 47 of file Timer.cpp.

The documentation for this class was generated from the following files:

- header/**Timer.hpp**
- source/**Timer.cpp**

## 6.28 Vector2D Class Reference

```
#include <Vector2D.hpp>
```

### Public Member Functions

- **Vector2D** ()  
*Constructor Simple Constructor, initialises members.*
- **Vector2D** (float x, float y)  
*Constructor Constructor with x and y coordinates.*
- **~Vector2D** ()  
*Destructor Destructor which does not much.*
- const float **getXPos** () const  
*getXPos Returns the XPos*
- const float **getYPos** () const  
*getYPos Returns the YPos*
- const float **calcLength** () const  
*calcLength Calculates the length of the vector*
- void **setXPos** (float newXPos)  
*setXPos Sets the XPos to a new value*
- void **setYPos** (float newYPos)  
*setYPos Sets the YPos to a new value*

### 6.28.1 Detailed Description

Definition at line 12 of file Vector2D.hpp.

### 6.28.2 Constructor & Destructor Documentation

#### 6.28.2.1 Vector2D::Vector2D ( )

Constructor Simple Constructor, initialises members.

Definition at line 4 of file Vector2D.cpp.

#### 6.28.2.2 Vector2D::Vector2D ( float x, float y )

Constructor Constructor with x and y coordinates.

##### Parameters

<i>x</i>	coordinate / position
<i>y</i>	coordinate / position

Definition at line 11 of file Vector2D.cpp.



### 6.28.2.3 Vector2D::~~Vector2D ( ) [inline]

Destructor Destructor which does not much.

Definition at line 37 of file Vector2D.hpp.

## 6.28.3 Member Function Documentation

### 6.28.3.1 const float Vector2D::calcLength ( ) const

calcLength Calculates the length of the vector

#### Returns

length of the vector

Definition at line 18 of file Vector2D.cpp.

### 6.28.3.2 const float Vector2D::getXPos ( ) const [inline]

getXPos Returns the XPos

#### Returns

xPos Coordinate

Definition at line 46 of file Vector2D.hpp.

### 6.28.3.3 const float Vector2D::getYPos ( ) const [inline]

getYPos Returns the YPos

#### Returns

yPos Coordinate

Definition at line 54 of file Vector2D.hpp.

### 6.28.3.4 void Vector2D::setXPos ( float newXPos ) [inline]

setXPos Sets the XPos to a new value

Definition at line 71 of file Vector2D.hpp.

#### 6.28.3.5 void Vector2D::setYPos ( float newYPos ) [inline]

setYPos Sets the YPos to a new value

Definition at line 78 of file Vector2D.hpp.

The documentation for this class was generated from the following files:

- header/**Vector2D.hpp**
- source/**Vector2D.cpp**

## 6.29 Viewport Struct Reference

Struct **Viewport** (p. 80) Uses some parameters to describe a framework viewport.

```
#include <Viewport.hpp>
```

### Public Attributes

- std::string **viewportID** = "none"
- std::string **textureID** = "none"
- std::string **alignment** = "none"
- SDL\_Rect **viewport** = {0}
- float **percentageX** = 1.0f
- float **percentageY** = 1.0f

### 6.29.1 Detailed Description

Struct **Viewport** (p. 80) Uses some parameters to describe a framework viewport.

#### Parameters

<i>viewportID</i>	The name of the viewport
<i>textureID</i>	The texture associated to the viewport
<i>alignment</i>	
<i>viewport</i>	A SDL_Rect holding x, y, width and height
<i>percentageX</i>	
<i>percentageY</i>	

Definition at line 25 of file Viewport.hpp.

### 6.29.2 Member Data Documentation

#### 6.29.2.1 std::string Viewport::alignment = "none"

Definition at line 29 of file Viewport.hpp.

#### 6.29.2.2 float Viewport::percentageX = 1.0f

Definition at line 31 of file Viewport.hpp.

#### 6.29.2.3 float Viewport::percentageY = 1.0f

Definition at line 32 of file Viewport.hpp.

#### 6.29.2.4 std::string Viewport::textureID = "none"

Definition at line 28 of file Viewport.hpp.

#### 6.29.2.5 SDL\_Rect Viewport::viewport = {0}

Definition at line 30 of file Viewport.hpp.

#### 6.29.2.6 std::string Viewport::viewportID = "none"

Definition at line 27 of file Viewport.hpp.

The documentation for this struct was generated from the following file:

- header/**Viewport.hpp**



## Chapter 7

# File Documentation

### 7.1 header/Asset.hpp File Reference

```
#include <SDL2/SDL.h>
#include <string>
#include "../header/CommonEnums.hpp"
```

#### Classes

- struct **GFXAsset**  
***GFXAsset** (p. 35) A structure which contains all necessary data of an gfx.*
- struct **ImageAsset**  
***ImageAsset** (p. 36) A structure which contains all necessary data of an image.*
- struct **TextAsset**  
***TextAsset** (p. 63) A structure which contains all necessary data of an text.*

### 7.2 header/CommonEnums.hpp File Reference

#### Enumerations

- enum **FLIP** { **FLIP::NONE**, **FLIP::FLIP\_HORIZONTAL**, **FLIP::FLIP\_VERTICAL** }  
*Flip Flip defines constants for no flip (NONE), horizontal flip (FLIP\_HORIZONTAL) and vertical flip (FLIP\_VERTICAL) It will be converted in the SDL counterpart.*
- enum **TEXTQUALITY** { **TEXTQUALITY::SOLID**, **TEXTQUALITY::SHADED**, **TEXTQUALITY::BLENDED** }  
*TextQuality TextQuality defines the render quality of text Solid = low quality Shaded = medium quality Blended = high quality.*
- enum **States** {  
**States::None**, **States::Menu**, **States::Play**, **States::Pause**,  
**States::GameOver**, **States::Setting** }  
*States States defines constants for each state.*
- enum **StateAction** { **StateAction::Push**, **StateAction::Pop**, **StateAction::Clear** }  
*StateAction StateAction defines constants for each state action.*

### 7.2.1 Detailed Description

Common enums used throughout the framework

### 7.2.2 Enumeration Type Documentation

#### 7.2.2.1 enum **FLIP** [strong]

Flip Flip defines constants for no flip (NONE), horizontal flip (FLIP\_HORIZONTAL) and vertical flip (FLIP\_VERTICAL). It will be converted in the SDL counterpart.

Enumerator

**NONE**  
**FLIP\_HORIZONTAL**  
**FLIP\_VERTICAL**

Definition at line 19 of file CommonEnums.hpp.

#### 7.2.2.2 enum **StateAction** [strong]

StateAction StateAction defines constants for each state action.

Enumerator

**Push**  
**Pop**  
**Clear**

Definition at line 43 of file CommonEnums.hpp.

#### 7.2.2.3 enum **States** [strong]

States States defines constants for each state.

Enumerator

**None**  
**Menu**  
**Play**  
**Pause**  
**GameOver**  
**Setting**

Definition at line 36 of file CommonEnums.hpp.

#### 7.2.2.4 enum TEXTQUALITY [strong]

TextQuality TextQuality defines the render quality of text Solid = low quality Shaded = medium quality Blended = high quality.

Enumerator

**SOLID**

**SHADED**

**BLENDED**

Definition at line 29 of file CommonEnums.hpp.

## 7.3 header/Game.hpp File Reference

```
#include <iostream>
#include <fstream>
#include <map>
#include <nlohmann/json.hpp>
#include <SDL2/SDL.h>
#include "../header/GameStateMachine.hpp"
#include "../header/Texture.hpp"
#include "../header/Timer.hpp"
```

### Classes

- class **Game**

#### 7.3.1 Detailed Description

The **Game** (p. 19) class is an important class for the application

## 7.4 header/GameObject.hpp File Reference

```
#include <SDL2/SDL.h>
#include <string>
#include "../header/CommonEnums.hpp"
#include "../header/Vector2D.hpp"
```

### Classes

- class **GameObject**

### 7.4.1 Detailed Description

General game objects

## 7.5 header/GameOverState.hpp File Reference

```
#include "../header/GameState.hpp"
```

### Classes

- class **GameOverState**

### 7.5.1 Detailed Description

**Game** (p. 19) over state

## 7.6 header/GameState.hpp File Reference

```
#include <fstream>
#include <functional>
#include <map>
#include <nlohmann/json.hpp>
#include <SDL2/SDL.h>
#include <string>
#include <vector>
#include "../header/Asset.hpp"
#include "../header/MenuButton.hpp"
#include "../header/TextureManager.hpp"
#include "../header/Viewport.hpp"
```

### Classes

- class **GameState**

### 7.6.1 Detailed Description

Base class for all game states



## 7.7 header/GameStateMachine.hpp File Reference

```
#include <functional>
#include <map>
#include <memory>
#include <utility>
#include "../header/CommonEnums.hpp"
#include "../header/GameState.hpp"
```

### Classes

- class **GameStateMachine**

#### 7.7.1 Detailed Description

Finite state machine handling the states in a proper way

## 7.8 header/InputManager.hpp File Reference

```
#include <iostream>
#include <SDL2/SDL.h>
#include <vector>
#include "../header/Vector2D.hpp"
```

### Classes

- class **InputManager**

### Enumerations

- enum **mouse\_buttons** { **LEFT**, **MIDDLE**, **RIGHT** }  
*mouse\_buttons Enum for the mouse buttons*

#### 7.8.1 Detailed Description

The **InputManager** (p. 38) handles all input from different devices like mouse, keyboard and joysticks or gamepads

## 7.8.2 Enumeration Type Documentation

### 7.8.2.1 enum mouse\_buttons

mouse\_buttons Enum for the mouse buttons

Enumerator

**LEFT**  
**MIDDLE**  
**RIGHT**

Definition at line 23 of file InputManager.hpp.

## 7.9 header/Logfile.hpp File Reference

```
#include <fstream>
#include <nlohmann/json.hpp>
#include <string>
```

### Classes

- class **Logfile**

## 7.10 header/MenuButton.hpp File Reference

```
#include <functional>
#include "../header/CommonEnums.hpp"
#include "../header/GameObject.hpp"
```

### Classes

- struct **Button**  
***Button** (p. 14) struct Structure for saving init values of a button.*
- class **MenuButton**

### 7.10.1 Detailed Description

Menu button for something to click on

## 7.11 header/MenuState.hpp File Reference

```
#include "../header/GameState.hpp"
```

### Classes

- class **MenuState**

#### 7.11.1 Detailed Description

Menu state

## 7.12 header/Net.hpp File Reference

```
#include <cstring>
#include <iostream>
#include <SDL2/SDL_net.h>
#include <stdio.h>
#include <stdlib.h>
#include <string>
#include <string.h>
```

### Classes

- class **Net**
- class **NetMessage**
- class **\_IpAddress**
- class **TcpSocket**
- class **HostSocket**
- class **ClientSocket**

### Typedefs

- typedef char **charbuf**[256]

#### 7.12.1 Typedef Documentation

##### 7.12.1.1 typedef char charbuf[256]

Definition at line 12 of file Net.hpp.

## 7.13 header/PauseState.hpp File Reference

```
#include "../header/GameState.hpp"
```

### Classes

- class **PauseState**

### 7.13.1 Detailed Description

Pause state

## 7.14 header/PlayState.hpp File Reference

```
#include "../header/GameState.hpp"
```

### Classes

- class **PlayState**

### 7.14.1 Detailed Description

Play state

## 7.15 header/SettingState.hpp File Reference

```
#include "../header/GameState.hpp"
```

### Classes

- class **SettingState**

### 7.15.1 Detailed Description

Setting state

## 7.16 header/SoundManager.hpp File Reference

```
#include <iostream>
#include <map>
#include <SDL2/SDL_mixer.h>
#include <string>
```

### Classes

- class **SoundManager**

### Enumerations

- enum **SoundType** { **SOUND\_MUSIC**, **SOUND\_SFX** }  
*SoundType Constants for Music or SFX.*

#### 7.16.1 Detailed Description

The **SoundManager** (p. 55) handles all music and sound effects

#### 7.16.2 Enumeration Type Documentation

##### 7.16.2.1 enum SoundType

SoundType Constants for Music or SFX.

##### Enumerator

***SOUND\_MUSIC***  
***SOUND\_SFX***

Definition at line 21 of file SoundManager.hpp.

## 7.17 header/SystemTime.hpp File Reference

```
#include <sstream>
#include <string>
#include <time.h>
```

### Classes

- class **SystemTime**

### 7.17.1 Detailed Description

System Time functions

## 7.18 header/Texture.hpp File Reference

```
#include <iostream>
#include <SDL2/SDL.h>
#include <SDL2/SDL_image.h>
#include <SDL2/SDL_ttf.h>
#include <string>
```

### Classes

- class **Texture**

### Enumerations

- enum **TextQuality** { **SOLID**, **SHADED**, **BLENDED** }  
*SoundType Constants for text quality SOLID = low, SHADED = medium, BLENDED = high.*

### 7.18.1 Detailed Description

The Texture-Class handles all textures in the application

### 7.18.2 Enumeration Type Documentation

#### 7.18.2.1 enum TextQuality

SoundType Constants for text quality SOLID = low, SHADED = medium, BLENDED = high.

#### Enumerator

**SOLID**  
**SHADED**  
**BLENDED**

Definition at line 23 of file Texture.hpp.

## 7.19 header/TextureManager.hpp File Reference

```
#include <map>
#include <memory>
#include <SDL2/SDL2_gfxPrimitives.h>
#include "../header/Texture.hpp"
```

## Classes

- class **TextureManager**

### 7.19.1 Detailed Description

The **TextureManager** (p. 68) handles all textures for the application

## 7.20 header/Timer.hpp File Reference

```
#include <SDL2/SDL.h>
```

## Classes

- class **Timer**

### 7.20.1 Detailed Description

A class with sdl timer functions

## 7.21 header/Vector2D.hpp File Reference

```
#include <math.h>
```

## Classes

- class **Vector2D**

### 7.21.1 Detailed Description

Represents a 2 dimensional vector

## 7.22 header/Viewport.hpp File Reference

Struct for handling a viewport in the **TextureManager** (p. 68).

```
#include <SDL2/SDL.h>
#include <string>
```

## Classes

- struct **Viewport**

Struct **Viewport** (p. 80) Uses some parameters to describe a framework viewport.

### 7.22.1 Detailed Description

Struct for handling a viewport in the **TextureManager** (p. 68).

#### Author

DataSoong2330

**Bug** No bugs known

## 7.23 html/dynsections.js File Reference

### Functions

- function **toggleVisibility** (linkObj)
- function **updateStripes** ()
- function **toggleLevel** (level)
- function **toggleFolder** (id)
- function **toggleInherit** (id)

### 7.23.1 Function Documentation

#### 7.23.1.1 function toggleFolder ( *id* )

Definition at line 49 of file dynsections.js.

#### 7.23.1.2 function toggleInherit ( *id* )

Definition at line 84 of file dynsections.js.

#### 7.23.1.3 function toggleLevel ( *level* )

Definition at line 28 of file dynsections.js.

#### 7.23.1.4 function toggleVisibility ( *linkObj* )

Definition at line 1 of file dynsections.js.



## 7.23.1.5 function updateStripes ( )

Definition at line 22 of file dynsections.js.

## 7.24 html/jquery.js File Reference

## Functions

- **b extend** ({cssHooks:{opacity:{get:function(bw, bv){if(bv){var e=Z(bw,"opacity","opacity");return e===""?"1"↵:e}else{return bw.style.opacity}}}, cssNumber:{fillOpacity:true, fontWeight:true, lineHeight:true, opacity↵:true, orphans:true, widows:true, zIndex:true, zoom:true}, cssProps:{"float":b.support.cssFloat?"css↵Float":"styleFloat"}, style:function(bx, bw, bD, by){if(!bx||bx.nodeType===3||bx.nodeType===8||!bx.↵style){return}var bB, bC, bz=b.camelCase(bw), bv=bx.style, bE=b.cssHooks[bz];bw=b.cssProps[bz]||bz;if(b↵D!=L){bC=typeof bD;if(bC==="string"&&(bB=l.exec(bD)))bD=(+(bB[1]+1)\*+bB[2])+parseFloat(b.↵css(bx, bw));bC="number"}if(bD==null||bC==="number"&&isNaN(bD)){return}if(bC==="number"&&!b.css↵Number[bz]){bD+="px"}if(!bE||!("set"in bE)||bD=bE.set(bx, bD))!=L){try{bv[bw]=bD}catch(bA){}}else{if(bE↵&&"get"in bE &&(bB=bE.get(bx, false, by))!=L){return bB}return bv[bw]}}, css:function(by, bx, bv){var bw,↵e;bx=b.camelCase(bx);e=b.cssHooks[bx];bx=b.cssProps[bx]||bx;if(bx==="cssFloat"){bx="float"}if(e &&"get"↵in e &&(bw=e.get(by, true, bv))!=L){return bw}else{if(Z){return Z(by, bx)}}}, swap:function(bx, bw, by){var↵e={};for(var bv in bw){e[bv]=bx.style[bv];bx.style[bv]=bw[bv]}by.call(bx);for(bv in bw){bx.style[bv]=e[bv]}}
- **b each** (["height","width"], function(bv, e){b.cssHooks[e]={get:function(by, bx, bw){var bz;if(bx){if(by.offset↵Width!=0){return p(by, e, bw)}else{b.swap(by, a7, function(){bz=p(by, e, bw)}}}return bz}}, set:function(bw,↵bx){if(bc.test(bx)){bx=parseFloat(bx);if(bx >=0){return bx+"px"}}else{return bx}}})
- **if** (!b.support.opacity)
- **b** (function(){if(!b.support.reliableMarginRight){b.cssHooks.marginRight={get:function(bw, bv){var e;b.↵swap(bw,{display:"inline-block"}, function(){if(bv){e=Z(bw,"margin-right","marginRight")}else{e=bw.style.↵marginRight}}};return e}}})
- **if** (av.defaultView &&av.defaultView.getComputedStyle)
- **if** (av.documentElement.currentStyle)
- **function p** (by, bw, bv)
- **if** (b.expr &&b.expr.filters)

## Variables

- **function bb**
- **function L** {var av=bb.document,bu=bb.navigator,bl=bb.location
- **var b**
- **var au** =/opacity=([^\s]\*)/,z=/([A-Z]|^ms)/g,bc=/^-?\d+(?:px)?\$/i,bn=/^-?\d/,l=/^([^\+])=([^\+\.de]+)/,a7={position↵:"absolute",visibility:"hidden",display:"block"},an=["Left","Right"],a1=["Top","Bottom"],Z,a1,aX
- **b fn css** =function(e,bv){if(arguments.length===2&&bv===L){return this}return b.access(this,e,bv,true,function(bx,bw,by){return↵by!=L?b.style(bx,bw,by):b.css(bx,bw)}})
- **b curCSS** =b.css
- **Z** =a1||aX
- **var k** =/%20/g
- **var ap** =/[\\\$]/
- **var bs** =/r?\n/g
- **var bq** =/#.\*\$/
- **var aD** =/^(.\*?)[\t]\*([^\r\n]\*)r?\$/mg
- **var aZ** =/^(?:color|date|datetime|datetime-local|email|hidden|month|number|password|range|search|tel|text|time|url|week)\$/i
- **var aM** =/^(?:about|app|app-storage|.+\\-extension|file|res|widget):\$/
- **var aQ** =/^(?:GET|HEAD)\$/
- **var c**

## 7.24.1 Function Documentation

7.24.1.1 `b ( function() { if ( !b.support.reliableMarginRight ) { b.cssHooks.marginRight = { get: function ( bw, bv ) { var e; b.swap( bw, { display: "inline-block" }, function () { if ( bv ) { e = Z( bw, "margin-right", "marginRight" ) } else { e = bw.style.marginRight } } } } } } )`

7.24.1.2 `b.each ( function ( bv, e ) { b.cssHooks[e] = { get: function ( by, bx, bw ) { var bz; if ( bx ) { if ( by.offsetWidth !== 0 ) { return p( by, e, bw ) } else { b.swap( by, a7, function () { bz = p( by, e, bw ) } ) } } } } } } return bz } } , set: function ( bw, bx ) { if ( bc.test( bx ) ) { bx = parseFloat( bx ); if ( bx >= 0 ) { return bx + "px" } } else { return bx } } } )`

7.24.1.3 `b.extend ( { cssHooks: { opacity: { get: function ( bw, bv ) { if ( bv ) { var e = Z( bw, "opacity", "opacity" ); return e === "" ? "1" : e } else { return bw.style.opacity } } } } , cssNumber: { fillOpacity: true, fontWeight: true, lineHeight: true, opacity: true, orphans: true, widows: true, zIndex: true, zoom: true } , cssProps: { "float": b.support.cssFloat ? "cssFloat" : "styleFloat" } , style: function ( bx, bw, bD, by ) { if ( !bx || bx.nodeType === 3 || bx.nodeType === 8 || !bx.style ) { return } var bB, bC, bz = b.camelCase( bw ), bv = bx.style, bE = b.cssHooks[bz]; bw = b.cssProps[bz] || bz; if ( bD !== L ) { bC = typeof bD; if ( bC === "string" && ( bB = l.exec( bD ) ) ) { bD = ( + ( bB[1] + 1 ) * + bB[2] ) + parseFloat( b.css( bx, bw ) ); bC = "number" } if ( bD === null || bC === "number" && !isNaN( bD ) ) { return } if ( bC === "number" && !b.cssNumber[bz] ) { bD += "px" } if ( !bE || !("set" in bE) || ( bD = bE.set( bx, bD ) ) !== L ) { try { bv[bw] = bD; catch ( bA ) {} } } else { if ( bE && "get" in bE && ( bB = bE.get( bx, false, by ) ) !== L ) { return bB } return bv[bw] } } } , css: function ( by, bx, bv ) { var bw, e; bx = b.camelCase( bx ); e = b.cssHooks[bx]; bx = b.cssProps[bx] || bx; if ( bx === "cssFloat" ) { bx = "float" } if ( e && "get" in e && ( bw = e.get( by, true, bv ) ) !== L ) { return bw } else { if ( Z ) { return Z( by, bx ) } } } , swap: function ( bx, bw, by ) { var e = {}; for ( var bv in bw ) { e[bv] = bx.style[bv]; bx.style[bv] = bw[bv] } by.call( bx ); for ( bv in bw ) { bx.style[bv] = e[bv] } } } )`

7.24.1.4 `if ( av.documentElement.currentStyle )`

Definition at line 23 of file jquery.js.

7.24.1.5 `if ( av.defaultView && av.defaultView.getComputedStyle )`

Definition at line 23 of file jquery.js.

7.24.1.6 `if ( b.expr && b.expr.filters )`

Definition at line 23 of file jquery.js.

7.24.1.7 `if ( !b.support.opacity )`

Definition at line 23 of file jquery.js.

7.24.1.8 `function p ( by, bw, bv )`

Definition at line 23 of file jquery.js.

## 7.24.2 Variable Documentation

7.24.2.1 `var aD = /^(.?:)[\t]*([^\r\n]*)\r?$/mg`

Definition at line 23 of file jquery.js.

7.24.2.2 `var aM = /^(?:about|app|app\|-storage|.\+|-extension|file|res|widget):$/`

Definition at line 23 of file jquery.js.

7.24.2.3 `var ap = /\[\]$/`

Definition at line 23 of file jquery.js.

7.24.2.4 `var aQ = /^(?:GET|HEAD)$/`

Definition at line 23 of file jquery.js.

7.24.2.5 `var au = /opacity=([\d\.\-]+)?,z=([A-Z]^\ms)/g,bC=^\d+-(?:px)?$/i,bN=^\d+-(?:\d+|[\d\.\-]+)?(?!de)/i,a7={position:"absolute",visibility:"hidden",display:"block"},aN=["Left","Right"],a1=["Top","Bottom"],Z,aI,aX`

Definition at line 23 of file jquery.js.

7.24.2.6 `var aZ = /^(?:color|date|datetime|datetime-local|email|hidden|month|number|password|range|search|tel|text|time|url|week)$/i`

Definition at line 23 of file jquery.js.

7.24.2.7 `var b`

**Initial value:**

```
=(function() {var bF=function(b0,b1){return new bF.fn.init(b0,b1,bD)},bU=bb.jquery,bH=
bb.$,bD,bY=/(?![^<]*(<[\w\W]+>)[^>]*$|#[\w\W-]*$)/,bM=/\S/,bI=/^\s+/,bE=/\s+$/,bA=/^<(\w+)\s*\>(?<\/\
1>)?$/i,bN=/^\s+/,bW=/^\s+$/,bJ=/^\s+$/,bP=/^\s+$/,bR=/^\s+$/,bQ=/^\s+$/,bS=/^\s+$/,bT=
function(b0,b1){return(b1+"").toUpperCase()},bX=bu.userAgent,bV,bC,e,bL=Object.prototype.toString,bG=Object.
prototype.hasOwnProperty,bZ=Array.prototype.push,bK=Array.prototype.slice,bO=String.prototype.trim,bV=Array.
prototype.indexOf,bx={};bF.fn=bF.prototype={constructor:bF,init:function(b0,b4,b3){var b2,b5,b1,b6;if(!b0){
return this}if(b0.nodeType){this.context=this[0]=b0;this.length=1;return this}if(b0=="body"&&!b4&&av.body){
this.context=av;this[0]=av.body;this.selector=b0;this.length=1;return this}if(typeof b0=="string"){if(b0.
charAt(0)=="<"&&b0.charAt(b0.length-1)==">"&&b0.length>=3){b2=[null,b0,null]}else{b2=bY.exec(b0)}if(b2&&(b2[1]
||b4)){if(b2[1]){b4=b4 instanceof bF?b4[0]:b4;b6=(b4?b4.ownerDocument||b4:av);b1=bA.exec(b0);if(b1){if(bF.
isPlainObject(b4)){b0=[av.createElement(b1[1])];bF.fn.attr.call(b0,b4,true)}else{b0=[b6.createElement(b1[1])]}
}else{b1=bF.buildFragment([b2[1]],[b6]);b0=(b1.cacheable?bF.clone(b1.fragment):b1.fragment).childNodes}
return bF.merge(this,b0)}else{b5=av.getElementById(b2[2]);if(b5&&b5.parentNode){if(b5.id===b2[2]){return b3.find(
b0)}this.length=1;this[0]=b5}this.context=av;this.selector=b0;return this}else{if(!b4||b4.jquery){return b4
||b3}.find(b0)}else{return this.constructor(b4).find(b0)}}else{if(bF.isFunction(b0)){return b3.ready(b0)}
if(b0.selector!==L){this.selector=b0.selector;this.context=b0.context;return bF.makeArray(b0,this)},selector:
"",jquery:"1.7.1",length:0,size:function(){return this.length},toArray:function(){return bK.call(this,0)},
get:function(b0){return b0===null?this.toArray():b0<0?this[this.length+b0]:this[b0]},pushStack:function(b1,b3
,b0){var b2=this.constructor();if(bF.isArray(b1)){b2.apply(b2,b1)}else{bF.merge(b2,b1)}b2.prevObject=this;b2
.context=this.context;if(b3=="find")b2.selector=this.selector+(this.selector?" ":"")+b0}else{if(b3){b2.
selector=this.selector+"."+b3+"("+b0+")"}return b2},each:function(b1,b0){return bF.each(this,b1,b0)},ready:
function(b0){bF.bindReady();bC.add(b0);return this},eq:function(b0){b0+=b0;return b0===-1?this.slice(b0):this.
slice(b0,b0+1)},first:function(){return this.eq(0)},last:function(){return this.eq(-1)},slice:function(){
return this.pushStack(bK.apply(this,arguments),"slice",bK.call(arguments).join(", ")),map:function(b0){return
this.pushStack(bF.map(this,function(b2,b1){return b0.call(b2,b1,b2)})),end:function(){return this.prevObject||
this.constructor(null)},push,bz,sort:[].sort,splice:[].splice};bF.fn.init.prototype=bF.fn;bF.extend=bF.fn.
extend=function(){var b9,b2,b0,b1,b6,b7,b5=arguments[0]||{};b4=1,b3=arguments.length,b8=false;if(typeof b5=="
boolean")b8=b5;b5=arguments[1]||{};b4=2;if(typeof b5!="object"&&!bF.isFunction(b5)){b5={}}if(b3===b4){b5=
this;--b4}for(b4<b3;b4++){if((b9=arguments[b4])!=null){for(b2 in b9){b0=b5[b2];b1=b9[b2];if(b5===b1){
continue}if(b8&&b1&&(bF.isPlainObject(b1)||b6=bF.isArray(b1)))}{if(b6){b6=false;b7=b0&&bF.isArray(b0)?b0:[]}}else{
b7=b0&&bF.isPlainObject(b0)?b0:[]}}b5[b2]=bF.extend(b8,b7,b1)}else{if(b1!==L){b5[b2]=b1}}}}return b5};bF.
extend({noConflict:function(b0){if(bb.$===bF){bb.$=bH}if(b0&&bb.jquery===bF){bb.jquery=bU}return bF}},isReady:
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false, readyWait:1, holdReady:function(b0){if(b0){bF.readyWait++;}else{bF.ready(true)}}, ready:function(b0){if((b0
===true&&!bF.readyWait)|| (b0!==true&&bF.isReady)){if(!av.body){return setTimeout(bF.ready,1)}bF.isReady=
true;if(b0!==true&&bF.readyWait>0){return}bC.fireWith(av,{bF});if(bF.fn.trigger){bF(av).trigger("ready").
off("ready")}}}, bindReady:function(){if(bC){return}bC=bF.Callbacks("once memory");if(av.readyState==="complete
"){return setTimeout(bF.ready,1)}if(av.addEventListener){av.addEventListener("DOMContentLoaded",e,false);
bb.addEventListner("load",bF.ready,false)}else{if(av.attachEvent){av.attachEvent("onreadystatechange",e);
bb.attachEvent("onload",bF.ready);var b0=false;try{b0=bb.frameElement==null}catch(b1){if(av.
documentElement.doScroll&&b0){bw()}}},isFunction:function(b0){return bF.type(b0)===function},isArray:Array.isArray|
function(b0){return bF.type(b0)===array},isWindow:function(b0){return b0&&typeof b0===object&&setInterval"
in b0},isNumeric:function(b0){return !isNaN(parseFloat(b0))&&isFinite(b0)},type:function(b0){return b0==
null?String(b0):bx[bL.call(b0)]||"object"},isPlainObject:function(b2){if(!b2||bF.type(b2)!=="object"||b2.
nodeType||bF.isWindow(b2)){return false}try{if(b2.constructor&&bG.call(b2,"constructor")&&bG.call(b2.constructor
.prototype,"isPrototypeOf")){return false}}catch(b1){return false}var b0;for(b0 in b2){return b0===
L||bG.call(b2,b0)},isEmptyObject:function(b1){for(var b0 in b1){return false}return true},error:function(b0
){throw new Error(b0)},parseJSON:function(b0){if(typeof b0!="string"||!b0){return null}b0=bF.trim(b0);if(
bb.JSON&&bb.JSON.parse){return bb.JSON.parse(b0)}if(bN.test(b0.replace(bW,"@").replace(bP,"").replace(bJ,"
"))){return(new Function("return "+b0))}() }bF.error("Invalid JSON: "+b0)},parseXML:function(b2){var b0,b1;try
{if(bb.DOMParser){b1=new DOMParser();b0=b1.parseFromStream(b2,"text/xml")}else{b0=new ActiveXObject("
Microsoft.XMLDOM");b0.async="false";b0.loadXML(b2)}catch(b3){b0=L;if(!b0||!b0.documentElement||b0.
getElementsByTagName("parsererror").length){bF.error("Invalid XML: "+b2)}return b0},noop:function(){},globalEval:functio
n(b0){if(b0&&bM.test(b0)){(bb.execScript||function(b1){bb["eval"].call(bb,b1)})(b0)}},camelCase:function(b0){
return b0.replace(bZ,"ms-").replace(bB,bT)},nodeName:function(b1,b0){return b1.nodeName&&b1.nodeName.
toUpperCase()===b0.toUpperCase()},each:function(b3,b6,b2){var b1,b4=0,b5=b3.length,b0=b5===
L||bF.isFunction(b3);if(b2){if(b0){for(b1 in b3){if(b6.apply(b3[b1],b2)===false){break}}else{for(;b4<b5;){
if(b6.apply(b3[b4++],b2)===false){break}}}}else{if(b0){for(b1 in b3){if(b6.call(b3[b1],b1,b3[b1])===false){
break}}}}else{for(;b4<b5;){if(b6.call(b3[b4],b4,b3[b4])===false){break}}}}return b3},trim:b0?function(b0){
return b0==null?"":b0.call(b0)}:function(b0){return b0==null?"":b0.toString()}.replace(bI,"").replace(bE,"")},
makeArray:function(b3,b1){var b0=b1||[];if(b3!=null){var b2=bF.type(b3);if(b3.length==null|b2==="string"||b2
===function||b2==="regexp"||bF.isWindow(b3)){b2.call(b0,b3)}else{bF.merge(b0,b3)}return b0},isArray:
function(b2,b3,b1){var b0;if(b3){if(bv){return bv.call(b3,b2,b1)}b0=b3.length;b1=b1?b1<0?Math.max(0,b0+b1):b1:0;
for(;b1<b0;b1++){if(b1 in b3&&b3[b1]===b2){return b1}}return -1},merge:function(b4,b2){var b3=b4.length,b1=0;
if(typeof b2.length==="number"){for(var b0=b2.length;b1<b0;b1++){b4[b3++] =b2[b1]}}else{while(b2[b1]!==
L){b4[b3++] =b2[b1++]}}b4.length=b3;return b4},grep:function(b1,b6,b0){var b2=[];b5=b0?!b0:b0;for(var b3=0,b4=
b1.length;b3<b4;b3++){b5=!b6(b1[b3],b3);if(b0!=b5){b2.push(b1[b3])}}return b2},map:function(b0,b7,b8){var
b5,b6,b4=[],b2=0,b1=b0.length,b3=b0 instanceof bF||b1===L&&typeof b1==="number"&&((b1>0&&b0[0]&&b0[b1-1])||
b1===0|bF.isArray(b0));if(b3){for(;b2<b1;b2++){b5=b7(b0[b2],b2,b8);if(b5!=null){b4[b4.length]=b5}}}else{for(
b6 in b0){b5=b7(b0[b6],b6,b8);if(b5!=null){b4[b4.length]=b5}}return b4.concat.apply([],b4)},guid:1,proxy:
function(b4,b3){if(typeof b3==="string"){var b2=b4[b3];b3=b4;b4=b2;if(!bF.isFunction(b4)){return
L}var b0=bK.call(arguments,2),b1=function(){return b4.apply(b3,b0.concat(bK.call(arguments,0)));};b1.guid=b4.
guid=b4.guid|b1.guid|bF.guid++;return b1},access:function(b0,b8,b6,b2,b5,b7){var b1=b0.length;if(typeof b8
===object){for(var b3 in b8){bF.access(b0,b3,b8[b3],b2,b5,b6)}return b0;if(b6!:=
L){b2=!b7&&b2&&bF.isFunction(b6);for(var b4=0;b4<b1;b4++){b5=b0[b4],b8,b2?b6.call(b0[b4],b4,b5(b0[b4],b8)):
b6,b7)}return b0}return b1?b5(b0[0],b8):L},now:function(){return(new Date()).getTime()},uaMatch:function(b1)
{b1=b1.toLowerCase();var b0=by.exec(b1)||bR.exec(b1)||bQ.exec(b1)||b1.indexOf("compatible")<0&&bS.exec(b1)||
[];return{browser:b0[2]||"0",version:b0[2]||"0"},sub:function(b0,b3,b4){function new b0(b3,b4){bF.extend(true,b0,this);b0.superclass=this;b0.fn=b0.prototype=this;b0.fn.constructor=b0;b0.sub=this.
sub;b0.fn.init=function b2(b3,b4){if(b4&&b4 instanceof bF&&!(b4 instanceof b0)){b4=b0(b4)}return bF.fn.init.
call(this,b3,b4,b1)};b0.fn.init.prototype=b0.fn;var b1=b0(av);return b0},browser:{},bF.each("Boolean Number
String Function Array Date RegExp Object".split(" "),function(b1,b0){bx["[object "+b0+"]"]=b0.toLowerCase()
});bv=bF.uaMatch(bX);if(bv.browser){bF.browser[bv.browser]=true;bF.browser.version=bv.version;if(bF.browser.
webkit){bF.browser.safari=true}if(bM.test("\xA0")){bI="/[\s\xA0]+/;bE="/[\s\xA0]+$/;bD=bF(av);if(av.
addEventListener){e=function(){av.removeEventListener("DOMContentLoaded",e,false);bF.ready()}}else{if(av.attachEvent){
e=function(){if(av.readyState==="complete"){av.detachEvent("onreadystatechange",e);bF.ready()}}}}function bw
(){if(bF.isReady){return}try{av.documentElement.doScroll("left")}catch(b0){setTimeout(bw,1)}return}bF.ready(
)}return bF}());var a2={};function X(e){var bv=a2[e]={},bw,bx;e=e.split(/\s+/);for(bw=0,bx=e.length;bw<bx;bw
++){bv[e[bw]]=true}return bv}.Callbacks=function(bw){bw=bw?{a2[bw]|X(bw)}:{};var bB=[],bC=[],bx,by,bv,bz,
bA,bE=function(bG,bF){var bG,bJ,bI,bH,bK;for(bG=0,bJ=bF.length;bG<bJ;bG++){bI=bF[bG];bH=
bI.type(bI);if(bH==="array"){bE(bI)}else{if(bH==="function"){if(!bw.unique||!bD.has(bI)){bB.push(bI)}}},e=
function(bG,bF){bF=bF||[];bx=!bw.memory||[bG,bF];by=true;bA=bv||0;bv=0;bz=bB.length;for(;bB&&bA<bz;bA++){if(
bB[bA].apply(bG,bF)===false&&bv.stopOnFalse){bx=true;break}}by=false;if(bB){if(bB.length){bC=bC.concat(bB);bC.shift();bD.fireWith(bx[0],bx[1])}}else{if(bx===true){bD.disable()}else{bB=[]}}},bD={add:function(){if(
this){var bF=bB.length;bE(arguments);if(by){bz=bB.length}else{if(bx&&bx!==true){bv=bF;e(bx[0],bx[1])}}return
this},remove:function(){if(bB){var bF=arguments,bH=0,bI=bF.length;for(;bH<bI;bH++){for(var bG=0;bG<bB.length;
bG++){if(bF[bH]===bB[bG]){if(bI){if(bG<=bI){bz--;if(bG<=bA){bA--}}bB.splice(bG--,1);if(bw.unique){break}}}}
return this},has:function(bG){if(bB){var bF=0,bH=bB.length;for(;bF<bH;bF++){if(bG===bB[bF]){return true}}
return false},empty:function(){bB=[]};return this},disable:function(){bB=bC=bx=L;return this},disabled:
function(){return !bB},lock:function(){bC=L;if(!bx||bx===true){bD.disable()}return this},locked:function(){return
!bC},fireWith:function(bG,bF){if(bC){if(bI){if(!bw.once){bC.push([bG,bF])}}else{if(!bw.once&&bx){e(bG,bF)}
}}return this},fire:function(){bD.fireWith(this,arguments);return this},fired:function(){return !bI};
return bD};var aJ=b.slice;b.extend({Deferred:function(bv){var bx=b.Callbacks("once memory"),bw=
b.Callbacks("once memory"),bv=b.Callbacks("memory"),e="pending",bA={resolve:bx,reject:bw,notify:bv},bC={
done:bx.add,fail:bw.add,progress:bv.add,state:function(){return e},isResolved:bx.fired,isRejected:bw.fired,then:
function(bE,bD,bF){bB.done(bE).fail(bD).progress(bF);return this},always:function(){bB.done.apply(bB,
arguments).fail.apply(bB,arguments);return this},pipe:function(bF,bE,bD){return b.Deferred(function(bG){
b.each({done:[bF,"resolve"],fail:[bE,"reject"],progress:[bD,"notify"]},function(bI,bL){var bH=bL[0],bK=bL[1];
bJ;if(bI.isFunction(bH)){bB[bI](function(){bD=bH.apply(this,arguments);if(bJ&&bI.isFunction(bJ.promise){bJ.
promise().then(bG.resolve,bG.reject,bG.notify)}else{bG[bK+"With"](this===bB?bG:this,[bJ])}})}else{bB[bI](bG[
bK])}})).promise(),promise:function(bE){if(bE===null){bE=bC}else{for(var bD in bC){bE[bD]=bC[bD]}}return bE
}},bB=bC.promise({}),bz;for(bz in bA){bB[bz]=bA[bz].fire;bB[bz+"With"]=bA[bz].fireWith}bB.done(function(){e=
"resolved"},bv.disable,bv.lock).fail(function(e){e="rejected"},bx.disable,bv.lock);if(bv){bv.call(bB,bB)}
return bB},when:function(bA){var bx=aJ.call(arguments,0),bv=0,e=bx.length,bB=new Array(e),bw=e,by=e,bC=e<=1&&bA&&
&bA.isFunction(bA.promise)?bA:b.Deferred(),bE=bC.promise(),function bD(bF){return function(bG){bx[bF]=
arguments.length>1?aJ.call(arguments,0):bG;if(!(--bv)){bC.resolveWith(bC,bx)}}function bz(bF){return function(bG){
bB[bF]=arguments.length>1?aJ.call(arguments,0):bG;bC.notifyWith(bE,bB)}if(e>1){for(;bv<e;bv++){if(bx[bv]&&
bx[bv].promise&&bI.isFunction(bx[bv].promise){bx[bv].promise().then(bD(bv),bC.reject,bz(bv))}else{--bv}}if(!
bv){bC.resolveWith(bC,bx)}}else{if(bC!=bA){bC.resolveWith(bC,e?[bA]:[])}}return bE}};
b.support=(function(){var bJ,bI,bF,bG,bx,bE,bA,bD,bz,bK,bB,by,bw,bv=av.createElement("div"),bH=av.

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\n|t|r|/g,af=/s+/,aU=/r/g,g=/^(:?button|input)$/i,D=/^(:?button|input|object|select|textarea)$/i,l=/^a(?:rea
)?$/i,ao=/^(:?autofocus|autoplay|async|checked|controls|defer|disabled|hidden|loop|multiple|open|readonly|
required|scoped|selected)$/i,F=b.support.getSetAttribute,bv,aY,aF;b.fn.extend({attr:function(e,bv){return b.ac
cess(this,e,bv,true,b.attr)},removeAttr:function(e){return this.each(function(){b.removeAttr(this,e)}),prop
:function(e,bv){return b.access(this,e,bv,true,b.prop)},removeProp:function(e){b=
b.propFix[e]||e;return this.each(function(){try{this[e]=L;delete this[e]}catch(e){}})},addClass:function(
by){var bA,bw,bv,bx,bz,bB,e;if(b.isFunction(by)){return this.each(function(bC){b(this).addClass(by.call(this,
bC,this.className))}})}if(by&&typeof by=="string"){bA=by.split(af);for(bw=0,bv=this.length;bw<bv;bw++){bx=
this[bw];if(bx.nodeType===1){if(!bx.className&&bA.length===1){bx.className=by}else{bx.className=bv+" "+bx.className+" ";for
(bB=0,e=bA.length;bB<e;bB++){if(!~bx.indexOf(" "+bA[bB]+" ")){bz+=bA[bB]+" "}}bx.className=
b.trim(bz)}}}return this},removeClass:function(bz){var bA,bw,bv,by,bx,bB,e;if(b.isFunction(bz)){return
this.each(function(bC){b(this).removeClass(bz.call(this,bC,this.className))}})}if(bz&&typeof bz=="string")||bz
===L{bA=(bz||"").split(af);for(bw=0,bv=this.length;bw<bv;bw++){by=this[bw];if(by.nodeType===1&&by.className)
){if(bz){bx=" "+by.className+" ".replace(aP," ");for(bB=0,e=bA.length;bB<e;bB++){bx=bx.replace(" "+bA[bB]+
" "," ");by.className=b.trim(bx)}else{by.className=""}}return this},toggleClass:function(bx,bv){var bw=
typeof bx,e=typeof bv=="boolean";if(b.isFunction(bx)){return this.each(function(by){
b(this).toggleClass(bx.call(this,by,this.className,bv),bv)}return this.each(function(){if(bw=="string"){
var bA,bz=0,bz=b(this),bB=bv,bC=bx.split(af);while((bA=bC[bz++])){bB=e?bB:!by.hasClass(bA);by[bB?"addClass":
"removeClass"](bA)}else{if(bw=="undefined"||bw=="boolean"){if(this.className){
b._data(this,"__className__",this.className)}this.className=this.className||bx===false?"":
b._data(this,"__className__")||""}}},hasClass:function(e){var bx=" "+e+" ",bw=0,bv=this.length;for(;bw<bv
;bw++){if(this[bw].nodeType===1&&(" "+this[bw].className+" ").replace(aP," ").indexOf(bx)>-1){return true}}
return false},val:function(bx){var e,bv,by,bw=this[0];if(!arguments.length){if(bw){e=
b.valHooks[bw.nodeName.toLowerCase()]||b.valHooks[bw.type];if(e&&"get" in e&&bv=e.get(bw,"value"))!=
L){return bv}bv=bw.value;return typeof bv=="string"?bv.replace(aU,""):bv==null?"":bv}return bv=
b.isFunction(bx)?return this.each(function(bA){var bz=b(this),bB;if(this.nodeType===1){return}if(bB=bx.
call(this,bA,bz.val())||bB===null){bB="";else{if(typeof bB=="number"){bB+="";else{if(
b.isArray(bB)){bB=b.map(bB,function(bC){return bC==null?"":bC+""});}}e=b.valHooks[this.nodeName.toLowerCase
()]||b.valHooks[this.type];if(!e||!"set" in e){e.set(this,bB,"value")==L{this.value=bB}}}}};
b.support.optHooks:{option:{get:function(e){var bv=e.attributes.value;return bv|bv.specified?e.value:e.
text}},select:{get:function(e){var bA,bv,bz,bx,by=e.selectedIndex,bB=[],bC=e.options,bw=e.type=="select-one";
if(bv<0){return null}bv=bv?by:0;bz=bv?by+1:bC.length;for(;bv<bz;bv++){bx=bC[bv];if(bx.selected&&
b.support.optDisabled!bx.disabled:bx.getAttribute("disabled")==null)&&(!bx.parentNode.disabled||
b.nodeName(bx.parentNode,"optgroup"))){bA=b(bx).val();if(bw){return bA}bB.push(bA)}if(bw&&!bB.length&&bC.
length){return b(bC[by]).val()}return bB},set:function(bv,bw){var e=b.makeArray(bw);
b(bv).find("option").each(function(){this.selected=b.inArray(b(this).val(),e)>0});if(!e.length){bv.
selectedIndex=-1}return e}},attrFn:{val:true,css:true,html:true,text:true,data:true,width:true,height:true,offset:
true},attr:function(bA,bx,bB,bz){var bw,e,by,bv=bA.nodeType;if(!bA||bv===3||bv===8||bv===2){return}if(bz&&bx
in b.attrFn){return b(bA)[bx](bB)}if(typeof bA.getAttribute=="undefined"){return
b.prop(bA,bx,bB)}by=bv!=1||!b.isXMLDoc(bA);if(by){bx=bx.toLowerCase();e=b.attrHooks[bx]||
(ao.test(bx)?aY:be)}if(bB!=L){if(bB===null){b.removeAttr(bA,bx);return}else{if(e&&"set" in e&&by&&(bw=e.set(bA,bx,bB))!=
L){return bw}else{bA.setAttribute(bx,""+bB);return bB}}else{if(e&&"get" in e&&by&&(bw=e.get(bA,bx,bB))!=null
){return bw}else{bw=bA.getAttribute(bx);return bw===null?L:bw}}},removeAttr:function(bx,bz){var by,bA,bv,e,
bw=0;if(bz&&bx.nodeType===1){bA=bz.toLowerCase().split(af);e=bA.length;for(;bw<e;bw++){bv=bA[bw];if(bv){by=
b.propFix[bv]||bv;b.removeAttr(bx,bv,"");bx.removeAttribute(F?bv:by);if(ao.test(bv)&&by in bx){bx[by]=false}}},
attrHooks:{type:{set:function(e,bv){if(g.test(e.nodeName)&&e.parentNode){b.error("type property can't be
changed")}else{if(!b.support.radioValue&&bv=="radio"&&b.nodeName(e,"input")){var bw=e.value;e.setAttribute("
type",bv);if(bw){e.value=bw}return bv}}},value:{get:function(bv,e){if(be&&b.nodeName(bv,"button")){return be.
get(bv,e)}return e in bv?bv.value:null},set:function(bv,bw,e){if(be&&b.nodeName(bv,"button")){return be.set(
bv,bw,e)}bv.value=bw}},propFix:{tabindex:"tabIndex",readOnly:"readOnly","for":"htmlFor","class":"className"
,maxlength:"maxLength",cellspacing:"cellSpacing",cellpadding:"cellPadding",rowspan:"rowSpan",colspan:
"colSpan",usemap:"useMap",frameborder:"frameBorder",contenteditable:"contentEditable"},prop:function(bz,bx,bA){var
bw,e,by,bv=bz.nodeType;if(!bz||bv===3||bv===8||bv===2){return}by=bv!=1||!b.isXMLDoc(bz);if(by){bx=
bw,e=by,bv=bz;propHooks[bx]||b.propHooks[bx]}if(bA==L){if(e&&"set" in e&&(bw=e.set(bz,bx,bx))!=
L){return bw}else{return(bz[bx]=bA)}else{if(e&&"get" in e&&(bw=e.get(bz,bx))!=null){return bw}else{return
bz[bx]}}},propHooks:{tabIndex:{get:function(bv){var e=bv.getAttributeNode("tabindex");return e&&e.specified
?parseInt(e.value,10):D.test(bv.nodeName)||l.test(bv.nodeName)&&bv.href?0:L}}};
b.attrHooks.tabindex=b.propHooks.tabindex;aY={get:function(bv,e){var bx,bw=b.prop(bv,e);return bw===true||
typeof bw!="boolean"&&(bx=bv.getAttributeNode(e))&&bx.nodeValue!=false?e.toLowerCase():
L},set:function(bv,bx,e){var bw;if(bx===false){b.removeAttr(bv,e)}else{bw=b.propFix[e]||e;if(bw in bv){bv[
bw]=true}bv.setAttribute(e,e.toLowerCase())return e};if(!F){aF={name:true,id:true};be=
b.valHooks.button={get:function(bw,bv){var e=bw.getAttributeNode(bv);return e&&aF[bv]?e.nodeValue:"":e.
specified?e.nodeValue:L},set:function(bw,bx,bv){var e=bw.getAttributeNode(bv);if(!e){e=av.createAttribute(
bv);bw.setAttributeNode(e)}return(e.nodeValue=bx+"")}};b.attrHooks.tabindex.set=be.set;
b.each(["width","height"],function(bv,e){b.attrHooks[e]=b.extend(b.attrHooks[e],{set:function(bw,bx){if(bx=
=="")bw.setAttribute(e,"auto");return bx}})});b.attrHooks.contenteditable={get:be.get,set:function(bv,bw,e)
){if(bw=="")bw="false"}be.set(bv,bw,e)});if(!b.support.hrefNormalized){b.each(["href","src","width","
height"],function(bv,e){b.attrHooks[e]=b.extend(b.attrHooks[e],{get:function(bx){var bw=bx.getAttribute(e,2);retu
rn bw===null?L:bw}})});if(!b.support.style){b.attrHooks.style={get:function(e){return e.style.cssText.
toLowerCase()}|L},set:function(e,bv){return(e.style.cssText=""+bv)}});if(!b.support.optSelected){
b.propHooks.selected=b.extend(b.propHooks.selected,{get:function(bv){var e=bv.parentNode;if(e){e.selectedIn
dex;if(e.parentNode){e.parentNode.selectedIndex}return null}})}if(!b.support.enctype){
b.propFix.enctype="encoding"}if(!b.support.checkOn){b.each(["radio","checkbox"],function(){
b.valHooks[this]={get:function(e){return e.getAttribute("value")==null?"on":e.value}}});
b.each(["radio","checkbox"],function(){b.valHooks[this]=b.extend(b.valHooks[this],{set:function(e,bv){if(b.
isArray(bv){return e.checked=b.inArray(b(e).val(),bv)>0}}});var bd=/^(:?textarea|input|select)$/i,n=/^(\
[^\.]*)?(?:\.\d+)?$/i,J=/\bhover\b$/i,S+)?/i,aO=/^key/,bf=/^(:?mouse|contextmenu|click|T=|^(:?focusin|
focusout|blur)$/i,U=/^(\w*)(?:\.[^\-]+)?(?:\.[^\-]+)?$/i,Y=function(e){var bv=U.exec(e);if(bv){bv[1]=(bv[1
]||"").toLowerCase();bv[3]=bv[3]&&new RegExp("(?:^|\\s)" + bv[3] + "(?:\\s|$)")}return bv},j=function(bw,e){var
bv="";b.attributes||;return(!e[1]||bw.nodeName.toLowerCase()===e[1])&&(!e[2]||bv.id||e[1].value===e[2])&&(!
e[3]||e[3].test((bv["class"]||{}).value))},bt=function(e){return b.event.special.hover?e.replace(J,"
mouseenter$1 mouseleave$1");b.event={add:function(bx,bC,bJ,bA,by){var bD,bB,bK,bI,bH,bF,e,bG,bv,bz,bw,bE;if(bx.
nodeType===3||bx.nodeType===8||!bC||!bC||!bD=b._data(bx))){return}if(bJ.handler){bJ.handler(bJ.bv,bz,bw,bE;if(bx.
guid){bJ.guid=b.guid++}bK=bD.events;if(!bK){bD.events=bK={}}bB=bD.handle;if(!bB){bD.handle=bB=function(bL){
return typeof b1=="undefined"&&(!bL||b.event.triggered!==bL.type)?b.event.dispatch.apply(bB.elem,arguments):
L;bB.elem=bx;bC=b.trim(bt(bC)).split(" ");for(bI=0;bI<bC.length;bI++){bH=n.exec(bC[bI])||[];bF=bH[1];e=(bH
[2]||"").split(" ").sort();bE=b.event.special[bF]||{};bF=(by?bE.delegateType:bE.bindType)||bF;bE=

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    .indexOf(bT)>=0)}{if(!bS){e.push(bV)}}else{if(bS){bR[bU]=false}}return false},ID:function(e){return e[1].replace(bK,
    ).toLowerCase(),CHILD:function(e){if(e[1]=== "nth"){if(!e[2]){by.error(e[0])}e[2]=e[2].replace(/\+|\s*/g,"")
    };var bR=(-?)(\d*)(?n([+|-]?\d*))?/.exec(e[2])=== "even"&&"2n"||e[2]=== "odd"&&"2n+1"||!/\D/.test(e[2])&&"0n+"
    +e[2]||e[2]};e[2]=(bR[1]+(bR[2]||1))-0;e[3]=bR[3]-0}else{if(e[2]){by.error(e[0])}e[0]=bI++;return
    e},ATTR:function(bU,bR,bS,e,bV,bW){var bT=bU[1]=bU[1].replace(bK,"")
    };if(!bW&&bE.attrMap[bT]){bU[1]=bE.attrMap[bT]}bU[4]=(bU[4]||bU[5]||"").replace(bK,"");if(bU[2]=== "~="){bU[4]=" "+bU[4]
    +bU[1],PSEUDO:function(bU,bR,bS,e,bV){if(bU[1]=== "not"){if((bH.exec(bU[3])||"").length>1||/^w
    /.test(bU[3])){bU[3]=by(bU[3],null,null,bR)}else{var bT=by.filter(bU[3],bR,bS,true^bV);if(!bS){e.push.apply(e,bT)}return
    false}}else{if(bE.match.POS.test(bU[0])||bE.match.CHILD.test(bU[0])){return true}}return bU},POS:function(e){e.unshift
    e}},filters:{enabled:function(e){return e.disabled===false&&e.type!=="hidden"},disabled:function(e){return
    e.disabled===true},checked:function(e){return
    e.checked===true},selected:function(e){if(e.parentNode){e.parentNode.selectedIndex}return e.selected===true},parent:fun
    !e.firstChild},has:function(bS,bR,e){return !!by(e[3],bS).length},header:function(e){return (/h\d
    /i).test(e.nodeName)},text:function(bS){var e=bS.getAttribute("type"),bR=bS.type;return bS.nodeName.toLowerCase()=== "inp
    "text"===bR&&(e===bR||e===null)},radio:function(e){return e.nodeName.toLowerCase()=== "input"&&"radio"
    ===e.type},checkbox:function(e){return e.nodeName.toLowerCase()=== "input"&&"checkbox"
    ===e.type},file:function(e){return e.nodeName.toLowerCase()=== "input"&&"file"===e.type},password:function(e){return
    e.nodeName.toLowerCase()=== "input"&&"password"===e.type},submit:function(bR,e){return e===bR.nodeName.toLowerCase()&&
    |e=== "button"&&"submit"===bR.type},image:function(e){return e.nodeName.toLowerCase()=== "input"&&"image"
    ===e.type},reset:function(bR){var e=bR.nodeName.toLowerCase();return(e=== "input"||e=== "button")&&"reset"
    ===bR.type},button:function(bR){var e=bR.nodeName.toLowerCase();return e=== "input"&&"button"===bR.type||e=== "button"
    },input:function(e){return (/input|select|textarea|button/i).test(e.nodeName)},focus:function(e){return
    e===e.ownerDocument.activeElement}},setFilters:{first:function(bR,e){return e===0},last:function(bS,bR,e,bT){return
    bR===bT.length-1},even:function(bR,e){return e%2===0},odd:function(bR,e){return
    e%2===1},lt:function(bS,bR,e){return bR<e[3]-0},gt:function(bS,bR,e){return bR>e[3]-0},nth:function(bS,bR,e){return
    e[3]-0===bR},eq:function(bS,bR,e){return e[3]-0===bR}},filter:{PSEUDO:function(bS,bX,bW,bY){var
    e=bX[1],bR=bE.filters[e];if(bR){return bR(bS,bW,bX,bY)}else{if(e==="contains"){return bS.textContent||bS.innerText||bW
    }.indexOf(bX[3])>=0}else{if(e==="not"){var bT=bX[3];for(var bV=0,bU=bT.length;bV<bU;bV++){if(bT[bV]===bS){return
    false}}return true}else{by.error(e)}}},CHILD:function(bS,bU){var
    bT,b0,bW,bZ,e,bV,bY,bX=bU[1],bR=bS;switch(bX){case "only":case "first":while((bR=bR.previousSibling)){if(bR.nodeType===1
    ){return true}bR=bS;case "last":while((bR=bR.nextSibling)){if(bR.nodeType===1){return false}}return true;case "nth"
    :bT=bU[2];b0=bU[3];if(bT===1&&b0===0){return
    true}bW=bU[0];bZ=bS.parentNode;if(bZ&&(bZ[bC]!==bW||!bS.nodeTypeIndex
    ){bV=0;for(bR=bZ.firstChild;bR;bR=bR.nextSibling){if(bR.nodeType===1){bR.nodeTypeIndex++bV}bZ[bC]=bW}bY=bS.nodeTypeIndex-b0;
    bR.nodeType===1&&bR.getAttribute("id")===e},TAG:function(bR,e){return(e==="*"
    &&bR.nodeType===1)||!bR.nodeName&&bR.nodeName.toLowerCase()===e},CLASS:function(bR,e){return(" "+(bR.className||bR.get
    ).indexOf(e)>-1),ATTR:function(bV,bT){var
    bS=bT[1],e=by.attr.by.attr(bV,bS):bE.attrHandle[bS]?bE.attrHandle[bS](bV):bV[bS]!==null?bV[bS]:bV.getAttribute(bS),bW=e
    :!bU&&by.attr.by.attr?e!=="":bW===bR.bU=== "=="?bW.indexOf(bR)>=0:bU=== "~="?( " "+bW+ " "
    ).indexOf(bR)>=0:!!bR.bW&&e!=="":false;bU=== "!="?bW!=="bR.bU=== "!="?bW.indexOf(bR)===0:bU=== "$"?"bW.substr(bW.length-bR.length
    )?bW===bR||bW.substr(0,bR.length+1)===bR+"-":false},POS:function(bU,bR,bS,bV){var
    e=bR[2],bT=bE.setFilters[e];if(bT){return bT(bU,bS,bR,bV)}};var bD=bE.match.POS,bX=function(bR,e){return"\""+(e-0+1)
    +bE.match){bE.match[bZ]=new RegExp(bE.match[bZ].source+/(?![^[]*\])?(?!^\(\\*\))/source);bE.leftMatch[bZ]=new
    RegExp(/^(?:.|\\r|\\n)*?/.source+bE.match[bZ].source.replace(/\\(\\d)/g,bX))}var
    bF=function(bR,e){bR=Array.prototype.slice.call(bR,0);if(e){e.push.apply(e,bR);return e}return
    bR};try{Array.prototype.slice.call(av.documentElement.childNodes,0)[0].nodeType}catch(bP){bF=function(bU,bT){var bS=0,
    Array]}[Array.prototype.push.apply(bR,bU)]}else{if(typeof bU.length==="number"){for(var
    e=bR[2],bT=bE.setFilters[e];bT;bT=bT.parentNode)}bZ=bW;while(bZ){e.unshift(bZ);bZ=bZ.parentNode}bV=bS.length;bR=e.length;
    bT=0;bT<bV&&bT<bR;bT++){if(bS[bT]!==e[bT]){return bG(bS[bT],e[bT])}return bT===bV?bG(bY,e[bT],-1):bG(bS[bT],bX,1)};bG
    bS}var bT=bR.nextSibling;while(bT){if(bT===e){return -1}bT=bT.nextSibling}return 1})(function(){var
    bR=av.createElement("div"),bS="script"+(new Date()).getTime(),e=av.documentElement;bR.innerHTML="<a name=' "+bS+" ' />"
    ;e.insertBefore(bR,e.firstChild);if(av.getElementById(bS)){bE.find.ID=function(bU,bV,bW){if(typeof
    bV.getElementById!=="undefined"&&!bW){var bT=bV.getElementById(bU[1]);return bT?bT.id===bU[1]:typeof
    bT.getAttributeNode!=="undefined"&&bT.getAttributeNode("id").nodeValue===bU[1]?bT.L:[]};bE.filter.ID=function(bV,bT)
    bU=typeof bV.getAttributeNode!=="undefined"&&bV.getAttributeNode("id");return
    bV.nodeType===1&&bU&&bU.nodeValue===bT}}e.removeChild(bR);e=bR=null})();(function(){var e=av.createElement("div"
    );e.appendChild(av.createComment(""));if(e.getElementsByTagName("div").length>0){bE.find.TAG=function(bR,bV){var
    bU=bV.getElementsByTagName(bR[1]);if(bR[1]=== "*") {var bT=[];for(var
    bS=0;bU[bS].bS++){if(bU[bS].nodeType===1){bT.push(bU[bS])}bU=bT}return bU}}e.innerHTML="<a href=' #'></a>";if(e.firstChild
    &&e.firstChild.getAttribute("href")!=="#"){bE.attrHandle.href=function(bR){return bR.getAttribute("href"
    ,2)}e=null})();if(av.querySelectorAll){(function(){var e=by,bT=av.createElement("div"),bS="__sizzle__"
    ;bT.innerHTML="<p class=' TEST'></p>";if(bT.querySelectorAll&&bT.querySelectorAll("p.TEST"
    ).length===0){return}by=function(b4,bV,bZ,b3){bV=bV||av;if(!b3&&!by.isXML(bV)){var b2=/^(\\w+$)|\\.(\\w+|-$)|$)/.exec(b4);if(b2&&(bV.nodeType===1||bV.nodeType===9)){if(b2[1]){return
    bF(bV.getElementsByTagName(b4),bZ)}else{if(b2[2]&&bE.find.CLASS&&bV.getElementsByClassName){return
    bF(bV.getElementsByClassName(b2[2]),bZ)}}if(bV.nodeType===9){if(b4==="body"&&bV.body){return bF([bV.body],bZ)}else{if
    bY=bV.getElementById(b2[3]);if(bY&&bY.parentNode){if(bY.id===b2[3]){return bF([bY,bZ]}else{return bF([bY,bZ])}}try{ret
    bF(bV.querySelectorAll(b4),bZ)}catch(b0){}else{if(bV.nodeType===1&&bV.nodeName.toLowerCase()!=="object"){var
    bW=bV,bX=bV.getAttribute("id"),bU=bX||bS,b6=bV.parentNode,b5=/^\\s*[+~]/.test(b4);if(!bX){bV.setAttribute("id"
    ,bU)}else{bU=bU.replace(/\\/g,"\\$&")}if(b5&&b6){bV=bV.parentNode;try{if(!b5||b6){return bF(bV.querySelectorAll("id=' "+
    "+b4),bZ)}catch(b1){}finally{if(!bX){bW.removeAttribute("id")}}}}return e(b4,bV,bZ,b3)};for(var bR in
    e){by[bR]=e[bR]}bT=null})();(function(){var
    e=av.documentElement,bS=e.matchesSelector||e.mozMatchesSelector||e.webkitMatchesSelector||e.msMatchesSelector;if(bS){va
    },bR=false;try{bS.call(av.documentElement,"[test='']":sizzle"
    )}catch(bT){bR=true}by.matchesSelector=function(bW,bY){bY=bY.replace(/\\=\\s*([\\^\\]]*)\\s*\\/g,"='$1'");if(!by.isXML(bW))
    (bY)){var bV=bS.call(bW,bY);if(bV||bU||bW.document&&bW.document.nodeType!==11){return bV}}catch(bX){}
    return by(bV,null,null,[bW]).length>0}});(function(){var e=av.createElement("div");e.innerHTML="<div
    class='test e'></div><div class='test'></div>";if(!e.getElementsByClassName||e.getElementsByClassName("e").length===
    0){return}e.lastChild.className="e";if(e.getElementsByClassName("e").length===1){return}bE.order.splice(1,0,
    "CLASS");bE.find.CLASS=function(bR,bS,bT){if(typeof bS.getElementsByClassName!=="undefined"&&bT){return bS.
    getElementsByTagName(bR[1])};e=null})();function bv(bR,bW,bV,bZ,bX,bY){for(var bT=0,bS=bZ.length;bT<bS;bT

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++){var e=bZ[bT];if(e){var bU=false;e=e[bR];while(e){if(e[bC]==bV){bU=bZ[e.sizset];break}if(e.nodeType===1
&&|bY){e[bC]=bV;e.sizset=bT}if(e.nodeName.toLowerCase()==bW){bU=e;break}e=e[bR]}bZ[bT]=bU}}function bN(bR,
bW,bV,bZ,bX,bY){for(var bT=0,bS=bZ.length;bT<bS;bT++){var e=bZ[bT];if(e){var bU=false;e=e[bR];while(e){if(e[
bC]==bV){bU=bZ[e.sizset];break}if(e.nodeType===1){if(!bY){e[bC]=bV;e.sizset=bT}if(typeof bW!="string"){if(e
===bW){bU=true;break}else{if(bY.filter(bW,[e]).length>0){bU=e;break}}e=e[bR]}bZ[bT]=bU}}if(av.
documentElement.contains).contains=function(bR,e){return bR!=e&&(bR.contains?bR.contains(e:true)};else{if(av.
documentElement.compareDocumentPosition){by.contains=function(bR,e){return !(bR.compareDocumentPosition(e)&16)}}
else{by.contains=function(){return false}}by.isXML=function(e){var bR=(e?e.ownerDocument||e:0).
documentElement;return bR?bR.nodeName!="HTML":false};var bM=function(bS,e,bW){var bV,bX=[],bU="",bY=e.nodeType?[e]:e;
while((bV=bE.match.PSEUDO.exec(bS)))bU+=bV[0];bS=bS.replace(bE.match.PSEUDO,"")bS=bE.relative[bS]?bS+"*":bS;
for(var bT=0,bR=bY.length;bT<bR;bT++){by(bS,bY[bT],bX,bW)}return by.filter(bU,bX)};by.attr=
b.attr;by.selectors.attrMap={};b.find=by;b.expr=by.selectors;b.expr[""]=b.expr.filters;
b.unique=by.uniqueSort;b.text=by.getText;b.isXMLDoc=by.isXML;b.contains=by.contains})();var ab=/Until$/,aq=
/^((?:parents|prevUntil|prevAll)/,a9=/,/,bp=/^([^\s]*$)/,P=Array.prototype.slice,H=
b.expr.match.POS,ay={children:true,contents:true,next:true,prev:true};b.fn.extend({find:function(e){var bw=
this,by,bv;if(typeof e!="string"){return b(e).filter(function(){for(by=0,bv=bw.length;by<bv;by++){if(b.con
tains(bw[by],this)){return true}}})var bx=this.pushStack("","find",e),bA,bB,bz;for(by=0,bv=this.length;by<bv
;by++){bA=bx.length;b.find(e,this[by],bx);if(bz>0){for(bB=bA;bB<bx.length;bB++){if(bz==bx[bB]){bx.splice(bB--,1);break}}}}return bx},has:function(bv){var e=b(bv);return this.filter(function
(){for(var bx=0,bw=e.length;bx<bw;bx++){if(b.contains(this,e[bx])){return true}}}),not(function(e){return
this.pushStack(aG(this,e,false),"not",e)},filter:function(e){return this.pushStack(aG(this,e,true),"filter",e
)},is:function(e){return !e&&(typeof e=="string"?H.test(e)?b(e,this.context).index(this[0])>=0:
b.filter(e,this).length>0:this.filter(e).length>0)},closest:function(bv,bx){var bv=[],bw,e,bz=this[0];if(
b.isArray(bv)){var bB=1;while(bz&&bz.ownerDocument&&bB!=bx){for(bw=0;bw<bv.length;bw++){if(
b(bz).is(bv[bw])){bv.push({selector:by[bw],elem:bz,level:bB})}bz=bz.parentNode;bB++}return bv}var bA=H.
test(bv)||typeof bv!="string"?b(bv,bx||this.context):0;for(bw=0,e=this.length;bw<e;bw++){bz=this[bw];while(bz)
{if(bA?bA.index(bz)>=1:b.find.matchesSelector(bz,by)){bv.push(bz);break}else{bz=bz.parentNode;if(!bz||!bz.
ownerDocument||bz===bx||bz.nodeType===1){break}}bv=bv.length>1?b.unique(bv):bv;return this.pushStack(bv,"
closest",bv)},index:function(e){if(!e){return this[0]&&this[0].parentNode?this.prevAll().length-1:if(typeof
e=="string"){return b.inArray(this[0],b(e))}return b.inArray(e.jquery?e[0]:e,this)},add:function(e,bv){var
bx=typeof e=="string"?b(e,bv):b.makeArray(e&&e.nodeType?[e]:e),bw=b.merge(this.get(),bx);return this.
pushStack(C(bx[0])||C(bw[0])?bw:b.unique(bw)),andSelf:function(){return this.add(this.prevObject())};function C(e
){return e||e.parentNode?e.parentNode.nodeType===1?b.each((parent:function(bv){var e=bv.parentNode;
return e&&e.nodeType===1?e:null},parents:function(e){return b.dir(e,"parentNode")},parentsUntil:function(bv,e,bw
){return b.dir(bv,"parentNode",bw)},next:function(e){return b.nth(e,2,"nextSibling")},prev:function(e){
return b.nth(e,2,"previousSibling")},nextAll:function(e){return b.dir(e,"nextSibling")},prevAll:function(e){
return b.dir(e,"previousSibling")},nextUntil:function(bv,e,bw){return b.dir(bv,"nextSibling",bw)},prevUntil:
function(bv,e,bw){return b.dir(bv,"previousSibling",bw)},siblings:function(e){return b.sibling(e.parentNode.
firstChild,e)},children:function(e){return b.sibling(e.firstChild)},contents:function(e){return
b.nodeName(e,"iframe")?e.contentDocument||e.contentWindow.document:b.makeArray(e.childNodes)},function(e,
bv){b.fn[e]=function(bv,bw){var bx=b.map(this,bv,by);if(!ab.test(e)){bw=by}if(bw&&typeof bw=="string"){bx=
b.filter(bw,bx)}bx=this.length>1&&ay[e]?b.unique(bx):bx;if(this.length>1|a9.test(bw)&&aq.test(e)){bx=bx.
reverse()}return this.pushStack(bx,e,P.call(arguments).join(","))};b.extend({filter:function(bw,e,bv){if(
bv=="":not(" "+bw+"")return e.length===1?b.find.matchesSelector(e[0],bw)?e[0]:[]:
b.find.matches(bw,e)},dir:function(bw,bv,by){var e=[],bx=bw[bv];while(bx&&bv.nodeType!==9&&(by===
L|bx.nodeType===1|!b(bx).is(by))){if(bx.nodeType===1){e.push(bx)}bx=bx[by]}return e},nth:function(bv,e,bw
,bx){e=e||1;var bv=0;for(;by;by=by[bw]){if(bv.nodeType===1&&bv===e){break}return bv},sibling:function(bw,
bv){var e=[];for(;bw=bw.nextSibling){if(bw.nodeType===1&&bv!=bv){e.push(bw)}return e}},function(aG(bx,
bw,e){bw=bw||0;if(b.isFunction(bw)){return b.grep(bx,function(bz,by){var bA=!bw.call(bz,by,bz);return bA===
e})}else{if(bw.nodeType){return b.grep(bx,function(bz,by){return(bz===bw)===e})}else{if(typeof bw=="string"
){var bv=b.grep(bx,function(bv){return b.nodeType===1});if(bp.test(bw)){return b.filter(bw,bv)}else{bw=
b.filter(bw,bv)}}}return b.grep(bx,function(bz,by){return(b.inArray(bz,bw)>0)===e})}function a(e){var bw=
aR.split("|"),bv=e.createDocumentFragment();if(bv.createElement){while(bw.length){bv.createElement(bw.pop())}
return bv}var aR="
abbr|article|aside|audio|canvas|datalist|details|figcaption|figure|footer|header|hgroup|mark|meter|nav|output|progress|
area|br|col|embed|hr|img|input|link|meta|param)(([\\w:]+)[^>]*)/>/ig,d=/<([\\w:]+)/w/</tbody/i,W=/<[&#?\\w+;/
ae=/<(?|script|style)/i,O=/<(?|script|object|embed|option|style)/i,ah=new RegExp("<(?|'+aR+'")","i"),o=/
checked\\s*(?:[\\^]|\\s*=\\s*checked\\.)/i,bm=/\\/(java|ecma)script/i,an=/^\\s*!?(?:\\[CDATA\\[\\|\\-\\|/ax={option:[1,"
<select multiple='multiple'>","</select>"],legend:[1,"<fieldset>","</fieldset>"],thead:[1,"<table>","</table>"],tr
:[2,"<table><tbody>","</tbody></table>"],td:[3,"<table><tbody><tr>","</tr></tbody></table>"],col:[2,"
<table><tbody></tbody><colgroup>","</colgroup></table>"],area:[1,"<map>","</map>"],_default:[0,"",""],ac=a(av);ax.
optgroup=ax.option;ax.tbody=ax.tfoot=ax.colgroup=ax.caption=ax.thead;ax.th=ax.td;if(!
b.support.htmlSerialize){ax._default=[1,"div<div>","</div>"]};b.fn.extend({text:function(e){if(
b.isFunction(e)){return this.each(function(bw){var bv=b(this);bv.text(e.call(this,bw,bv.text()))}}if(
typeof e!="object"&&e!=L){return this.empty().append((this[0]&&this[0].ownerDocument||av).createTextNode(e))}
return b.text(this)},wrapAll:function(e){if(b.isFunction(e)){return this.each(function(bw){
b(this).wrapAll(e.call(this,bw))}}if(this[0]){var bv=b(e,this[0].ownerDocument).eq(0).clone(true);if(this[
0].parentNode){bv.insertBefore(this[0])bv.map(function(){var bw=this;while(bw.firstChild&&bw.firstChild.
nodeType===1){bw=bw.firstChild}return bw}).append(this)}return this},wrapInner:function(e){if(
b.isFunction(e)){return this.each(function(bv){b(this).wrapInner(e.call(this,bv))}}return this.
each(function(){var bv=b(this),bw=bv.contents();if(bw.length){bw.wrapAll(e)}else{bv.append(e)}},wrap:
function(e){var bv=b.isFunction(e);return this.each(function(bw){b(this).wrapAll(bv?e.call(this,bw,e))}),unwrap
:function(){return this.parent().each(function(){if(!b.nodeName(this,"body")){b(this).replaceWith(this.
childNodes()).end()};append:function(){return this.domManip(arguments,true,function(e){if(this.nodeType===1){
this.appendChild(e)}},prepend:function(){return this.domManip(arguments,true,function(e){if(this.nodeType===1
){this.insertBefore(e,this.firstChild)}},before:function(){if(this[0]&&this[0].parentNode){return this.
domManip(arguments,false,function(bv){this.parentNode.insertBefore(bv,this)}},else{if(arguments.length){var e=
b.clean(arguments);e.push.apply(e,this.toArray());return this.pushStack(e,"before",arguments)}},after:
function(){if(this[0]&&this[0].parentNode){return this.domManip(arguments,false,function(bv){this.parentNode.
insertBefore(bv,this.nextSibling)}},else{if(arguments.length){var e=this.pushStack(this,"after",arguments);e.
push.apply(e,b.clean(arguments));return e}},remove:function(e,bx){for(var bv=0,bw;(bw=this[bv])!=null;bv++){if(
!e||b.filter(e,[bw]).length){if(bw.nodeType===1){b.cleanData(bw.getElementsByTagName("*"))};
b.cleanData([bw])}if(bw.parentNode){bw.parentNode.removeChild(bw)}return this},empty:function(){for(var e
=0,bv;(bv=this[e])!=null;e++){if(bv.nodeType===1){b.cleanData(bv.getElementsByTagName("*"))}while(bv.
firstChild){bv.removeChild(bv.firstChild)}return this},clone:function(bv,e){bv=bv==null?false:bv;e=e==null?bv:e;
return this.map(function(){return b.clone(this,bv,e)}),html:function(bx){if(bx==L){return this[0]&&this[0].
nodeType===1?this[0].innerHTML.replace(ag,""):null}else{if(typeof bx=="string"&&!ae.test(bx)&&(

```

```

b.support.leadingWhitespace||!ar.test(bx))&&!ax[(d.exec(bx)||["",""])[1].toLowerCase()]){bx=bx.replace(R,"
<$1></$2>");try{for(var bw=0,bv=this.length;bw<bv;bw++){if(this[bw].nodeType===1){
b.cleanData(this[bw]).getElementsByName("*");this[bw].innerHTML=bx}}catch(by){this.empty().append(bx)}
else{if(b.isFunction(bx)){this.each(function(bz){var e=b(this);e.html(bx.call(this,bz,e.html()))}}else{
this.empty().append(bx)}}return this},replaceWith:function(e){if(this[0]&&this[0].parentNode){if(
b.isFunction(e)){return this.each(function(bz){var bw=b(this),bv=bw.html();bw.replaceWith(e.call(this,bw,
bv))})}if(typeof e!="string"){e=b(e).detach();return this.each(function(){var bw=this.nextSibling,bv=this.
parentNode;b(this).remove();if(bw){b(bw).before(e)}else{b(bv).append(e)}}}else{return this.length?this.
pushStack(b(b.isFunction(e)?e():e),"replaceWith",e):this}},detach:function(e){return this.remove(e,true)},domManip:
function(bB,bF,bE){var bx,by,bA,bD,bC=bB[0],bv=[];if(!b.support.checkClone&&arguments.length===3&&typeof bC
=="string"&&o.test(bC)){return this.each(function(){b(this).domManip(bB,bF,bE,true)})}if(
b.isFunction(bC)){return this.each(function(bH){var bG=b(this);bB[0]=bC.call(this,bH,bF?bG.html():
L);bG.domManip(bB,bF,bE)})}if(this[0]){bD=bC&&bC.parentNode;if(b.support.parentNode&&bD&&bD.nodeType===11&&
bD.childNodes.length===this.length){bx={fragment:bD}}else{bx=b.buildFragment(bB,this,bv)}bA=bx.fragment;if(
bA.childNodes.length===1){by=bA=bA.firstChild}else{by=bA.firstChild;if(by){bF=bF&&
b.nodeName(by,"tr");for(var bw=0,e=this.length,bz=e-1;bw<e;bw++){bE.call(bF?ba(this[bw],by):this[bw],bx,
cacheable||e>1&&bw<bz)?b.clone(bA,true,true):bA}}if(bv.length){b.each(bv,bo){return this}};function ba(e,bv
){return b.nodeName(e,"table"?e.getElementsByName("tbody")[0]:e.appendChild(e.ownerDocument.
createElement("tbody"))):e}function t(bB,bv){if(bv.nodeType!==1||!b.hasData(bB)){return}var by,bx,e,bA=
b._data(bB),bz=b._data(bv,bA),bw=bA.events;if(bw){delete bz.handle;bz.events={};for(by in bw){for(bx=0,e=bw
[by].length;bx<e;bx++){b.event.add(bv,by+(bw[by][bx].namespace?":":"")+bw[by][bx],bw[by
][bx].data)}}if(bz.data){bz.data=b.extend({},bz.data)}function ai(bv,e){var bw;if(e.nodeType!==1){return}
if(e.clearAttributes){e.clearAttributes()}if(e.mergeAttributes){e.mergeAttributes(bv)}bw=e.nodeName.
toLowerCase();if(bw=="object"){e.outerHTML=bw.outerHTML}else{if(bw=="input"&&(bv.type=="checkbox"|bv.type=="
radio")){if(bv.checked){e.defaultChecked=e.checked=bv.checked}if(e.value!=bv.value){e.value=bv.value}}else{if(
bw=="option"){e.selected=bv.defaultSelected}else{if(bw=="input"|bw=="textarea"){e.defaultValue=bv.
defaultValue}}e.removeAttribute(b.expando)}b.buildFragment=function(bz,bx,bv){var by,e,bw,bA,bB=bz[0];if(bx&&bx[0
]){bA=bx[0].ownerDocument||bx[0]}if(!bA.createDocumentFragment){bA=av}if(bz.length===1&&typeof bB=="string"
&&bB.length<512&&bA==av&&bB.charAt(0)=="<"&&!o.test(bB)&&(b.support.checkClone||!o.test(bB))&&(
b.support.html5Clone||!ah.test(bB))){e=true;bw=b.fragments[bB];if(bw&&bw===1){by=bw}if(!by){by=bA.
createDocumentFragment();b.clean(bz,bA,by,bv)}if(e){b.fragments[bB]=bw?by:1;return{fragment:by,cacheable:e}};
b.fragments={};b.each({appendTo:"append",prependTo:"prepend",insertBefore:"before",insertAfter:"after",
replaceAll:"replaceAll"},function(e,bv){b.fn[e]=function(bw){var bz=[],bC=b(bw),bB=this.length===1&&this[0].
parentNode;if(bB&&bB.nodeType===11&&bB.childNodes.length===1&&bC.length===1){bC[bv](this[0]);return this}else{
for(var bA=0,bx=bC.length;bA<bx;bA++){var by=(bA?0:this.clone(true)):this.get();b(bC[bA])[bv](by);bz=bz.
concat(by)}return this.pushStack(bz,e,bC.selector)}}};function bg(e){if(typeof e.getElementsByName!="
undefined"){return e.getElementsByName("*")}else{if(typeof e.querySelector!="undefined"){return e.
querySelectorAll("*")}else{return[]}}function az(e){if(e.type=="checkbox"|e.type=="radio"){e.defaultChecked=e.
checked}function E(e){var bv=(e.nodeName||"").toLowerCase();if(bv=="input"){az(e)}else{if(bv=="script"&&
typeof e.getElementsByName!="undefined"){b.grep(e.getElementsByName("input"),az)}}function al(e){var bv=
av.createElement("div");ac.appendChild(bv);bv.innerHTML=e.outerHTML;return bv.firstChild}
b.extend({clone:function(bv,bA,bw){var e,bv,bx,bz=b.support.html5Clone||!ah.test("<" + bv.nodeName) ? bv.
cloneNode(true) : al(bv);if(!b.support.noCloneEvent||b.support.noCloneChecked)&&(bv.nodeType===1|bv.nodeType===11
)&&!b.isXMLDoc(bv)){ai(bv,bz);e=bg(bv);bv=bg(bz);for(bx=0;e[bx];++bx){if(bv[bx]){ai(e[bx],bv[bx])}}if(bA){t(
bv,bz);if(bw){e=bg(bv);bv=bg(bz);for(bx=0;e[bx];++bx){t(e[bx],bv[bx])}}e=bv=null;return bz},clean:function(
bw,by,bH,bA){var bF;by=by||av;if(typeof by.createElement=="undefined"){by=by.ownerDocument||by[0]&&by[0].
ownerDocument||av}var bI=[],bB;for(var bE=0,bz;(bz=bw[bE])!=null;bE++){if(typeof bz=="number"){bz+=""}if(!bz
){continue}if(typeof bz=="string"){if(!W.test(bz)){bz=by.createTextNode(bz)}else{bz=bz.replace(R,"<$1></$2>
");var bK=(d.exec(bz)||["",""])[1].toLowerCase(),bx=ax[bK]||ax._default,bD=bx[0],bv=by.createElement("div");
if(bv===av){ac.appendChild(bv)}else{a(by).appendChild(bv)}bv.innerHTML=bx[1]+bz+bx[2];while(bD--){bv=bv.
lastChild}if(!b.support.tbody){var e=w.test(bz),bC=bK=="table"&&!e?bv.firstChild&&bv.firstChild.childNodes[bx[1
]]=="<table>"&&!e?bv.childNodes[0]:for(bB=bC.length-1;bB>0;--bB){if(b.nodeName(bC[bB],"tbody")&&!bC[bB].
childNodes.length){bC[bB].parentNode.removeChild(bC[bB])}}if(!b.support.leadingWhitespace&&ar.test(bz)){bv.
insertBefore(bv.createElement(ar.exec(bz)[0]),bv.firstChild)}bz=bv.childNodes}var bG;if(
b.support.appendChecked){if(bz[0]&&typeof bG=bz.length=="number"){for(bB=0;bB<bG;bB++){E(bz[bB])}}else{E(
bz)}}if(bz.nodeType){bI.push(bz)}else{bI=b.merge(bI,bz)}}if(bH){bF=function(bL){return !bL.type||bm.test(bL.
type)};for(bE=0;bI[bE];bE++){if(bA&&b.nodeName(bI[bE],"script")&&!bI[bE].type||bI[bE].type.toLowerCase()===
"text/javascript"){bA.push(bI[bE].parentNode?bI[bE].parentNode.removeChild(bI[bE]):bI[bE])}else{if(bI[bE].
nodeType===1){var bJ=b.grep(bI[bE].getElementsByName("script"),bF);bI.splice.apply(bI,[bE+1,0].concat(bJ))
}bH.appendChild(bI[bE])}}return bI},cleanData:function(bv){var by,bw,e=b.cache,bB=
b.event.special,bA=b.support.deleteExpando;for(var bz=0,bx;(bx=bv[bz])!=null;bz++){if(bx.nodeName&&
b.noData[bx.nodeName.toLowerCase()]){continue}bw=bx[b.expando];if(bw){by=e[bw];if(by&&by.events){for(var bC
in by.events){if(bB[bC]){b.event.remove(bx,bC)}else{b.removeEvent(bx,bC,by.handle)}}if(bv.handle){by.handle
.elem=null}}if(bA){delete bx[b.expando]}else{if(bx.removeAttribute){bx.removeAttribute(
b.expando)}delete e[bw]}}};function bo(e,bv){if(bv.src){b.ajax({url:bv.src,async:false,dataType:"script"
})}else{b.globalEval((bv.text||bv.textContent||bv.innerHTML||"").replace(aN,"/*$0*/"))if(bv.parentNode){bv.
parentNode.removeChild(bv)}}var ak=/alpha\([^\)]*\)/i

```

Definition at line 16 of file jquery.js.

#### 7.24.2.8 function bb

Definition at line 16 of file jquery.js.

#### 7.24.2.9 var bq =/#.\*\$/

Definition at line 23 of file jquery.js.

7.24.2.10 `var bs =/\r?\n/g`

Definition at line 23 of file jquery.js.

7.24.2.11 `var c`

**Initial value:**

```
=/^\\\/\
* jQuery UI 1.8.18
*
* Copyright 2011
```

Definition at line 23 of file jquery.js.

7.24.2.12 `b fn css =function(e,bv){if(arguments.length===2&&bv===L){return this}return  
b.access(this,e,bv,true,function(bx,bw,by){return by!==L?b.style(bx,bw,by):b.css(bx,bw)}}}`

Definition at line 23 of file jquery.js.

7.24.2.13 `b curCSS =b.css`

Definition at line 23 of file jquery.js.

7.24.2.14 `var k =/%20/g`

Definition at line 23 of file jquery.js.

7.24.2.15 `function L {var av=bb.document,bu=bb.navigator,bl=bb.location`

Definition at line 16 of file jquery.js.

7.24.2.16 `Z =a||aX`

Definition at line 23 of file jquery.js.

## 7.25 `html/search/all_0.js` File Reference

### Variables

- var **searchData**

## 7.25.1 Variable Documentation

### 7.25.1.1 var searchData

**Initial value:**

```
=
[
  ['_5fcommon_5fenums_5f8hpp', ['_common_enums_8hpp', ['
    ../_common_enums_8hpp_8js.html#ab43c7e80acbcea88051c04c63e5450e9', 1, '_common_enums_8hpp.js' ]]],
  ['_5fcommon_5fenums_5f8hpp_2ejs', ['_common_enums_8hpp.js', ['../_common_enums_8hpp_8js.html', 1, '' ]]],
  ['_5finput_5fmanager_5f8hpp', ['_input_manager_8hpp', ['
    ../_input_manager_8hpp_8js.html#ae08396963c33b1a99191a1dbcb96e39c', 1, '_input_manager_8hpp.js' ]]],
  ['_5finput_5fmanager_5f8hpp_2ejs', ['_input_manager_8hpp.js', ['../_input_manager_8hpp_8js.html', 1, '' ]]],
  ['_5fipaddress', ['_IpAddress', ['../class___ip_address.html', 1, '_IpAddress'], ['
    ../class___ip_address.html#a506aacadc3547fdcf490ae29920b89a0', 1, '_IpAddress::_IpAddress()' ], ['
    ../class___ip_address.html#a779dc52827ee785e41d9e71e1671cb5b', 1, '_IpAddress::_IpAddress( UInt16 port )' ], ['
    ../class___ip_address.html#a1ee372343aaca69c9b54b44252914f48', 1, '_IpAddress::_IpAddress( std::string host, UInt16 port )' ]],
  ['_5fnet_5f8hpp', ['_net_8hpp', ['../_net_8hpp_8js.html#adabb1dfeba238e35f5ea40ecb31eded', 1, '_
    _net_8hpp.js' ]]],
  ['_5fnet_5f8hpp_2ejs', ['_net_8hpp.js', ['../_net_8hpp_8js.html', 1, '' ]]],
  ['_5fsound_5fmanager_5f8hpp', ['_sound_manager_8hpp', ['
    ../_sound_manager_8hpp_8js.html#a3828bfc5a490b9903089f8999a579ee7', 1, '_sound_manager_8hpp.js' ]]],
  ['_5fsound_5fmanager_5f8hpp_2ejs', ['_sound_manager_8hpp.js', ['../_sound_manager_8hpp_8js.html', 1, '' ]]],
  ['_5ftexture_5f8hpp', ['_texture_8hpp', ['../_texture_8hpp_8js.html#a32a7715249477fad5c45a34e5ac5d55a', 1, '_
    _texture_8hpp.js' ]]],
  ['_5ftexture_5f8hpp_2ejs', ['_texture_8hpp.js', ['../_texture_8hpp_8js.html', 1, '' ]]]
]
```

Definition at line 1 of file all\_0.js.

## 7.26 html/search/all\_1.js File Reference

### Variables

- var **searchData**

## 7.26.1 Variable Documentation

### 7.26.1.1 var searchData

**Initial value:**

```
=
[
  ['a', ['a', ['../class_game_object.html#a11857f459e212b42ef6b682e2b238e1c', 1, 'GameObject::a()' ], ['
    ../struct_button.html#a529efa5ef20c24c0dada504b6abb5c', 1, 'Button::a()' ] ]],
  ['accept', ['Accept', ['../class_host_socket.html#a61be7093448d76cf2dc5789b0391a7fb', 1, 'HostSocket' ] ]],
  ['ad'
```

Definition at line 1 of file all\_1.js.

## 7.27 html/search/all\_10.js File Reference

### Variables

- var **searchData**
- CommonEnums **hpp**

## 7.27.1 Variable Documentation

### 7.27.1.1 CommonEnums.hpp

Definition at line 6 of file all\_10.js.

### 7.27.1.2 var searchData

**Initial value:**

```
=
[
  ['p', ['p', ['../jquery_8js.html#a2335e57f79b6acfb6de59c235dc8a83e', 1, 'jquery.js']],
  ['pages_5f0_2ejs', ['pages_0.js', ['../pages__0_8js.html', 1, '']]],
  ['pathname', ['pathName', ['../navtree_8js.html#a364b3f4132309fa9aae78585cf2cb772', 1, 'navtree.js']],
  ['pause', ['pause', ['../class_timer.html#a0289effad7b573c508bc27e405900a23', 1, 'Timer::pause()'], ['
    ../common_enums_8hpp.html#a808e5cd4979462d3bbe3070d7d147444a105b296a83f9c105355403f3332af50f', 1, 'Pause() :&#160
```

Definition at line 1 of file all\_10.js.

## 7.28 html/search/all\_11.js File Reference

### Variables

- var **searchData**

## 7.28.1 Variable Documentation

### 7.28.1.1 var searchData

**Initial value:**

```
=
[
  ['quit', ['Quit', ['../class_net.html#af2836a9229d553bf106240ba2d3923e0', 1, 'Net::Quit()'], ['
    ../class_game.html#a8272be134d16c277bb014ad6a22fc357', 1, 'Game::quit()']],
  ['quitlogging', ['quitLogging', ['../class_logfile.html#a2e15bad46a719cd239bablee3e20c6e4', 1, 'Logfile']]]
]
```

Definition at line 1 of file all\_11.js.

## 7.29 html/search/all\_12.js File Reference

### Variables

- var **searchData**



## 7.29.1 Variable Documentation

### 7.29.1.1 var searchData

#### Initial value:

```
=
[
  ['r', ['r', ['../class_game_object.html#adf0f33f5a103f8960b49e37ad390ee7d', 1, 'GameObject::r()'], ['
    ../struct_button.html#aaf701ece10a82a5b764f7294b5906dbd', 1, 'Button::r()']]],
  ['readcookie', ['readCookie', ['../resize_8js.html#a578d54a5ebd9224fad0213048e7a49a7', 1, 'resize.js']],
  ['reading', ['READING', ['
    ../class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97a56564a3fb85ec411a20ac99ad0a559df', 1, 'NetMessage']],
  ['readme_2emd', ['README.md', ['../_r_e_a_d_m_e_8md.html', 1, ''']],
  ['ready', ['Ready', ['../class_tcp_socket.html#a6727e974bf44519c0695a25ffc168498', 1, 'TcpSocket']],
  ['receive', ['Receive', ['../class_client_socket.html#ad66b7a5ad5a99fc144c0034267184344', 1, 'ClientSocket']]
  ],
  ['registerstate', ['registerState', ['../class_game_state_machine.html#a6741c2efa55780bd809a2889172a5717', 1,
    'GameStateMachine']],
  ['removecolor', ['removeColor', ['../class_texture_manager.html#a7e9984dd269434403e25108bc7f9723c', 1, '
    TextureManager']],
  ['removefont', ['removeFont', ['../class_texture_manager.html#a89c9d1109c0b6434623c78844e938aa2', 1, '
    TextureManager']],
  ['removemusic', ['removeMusic', ['../class_sound_manager.html#a55360940bcadf3858c37781cd0e97919', 1, '
    SoundManager']],
  ['removesfx', ['removeSFX', ['../class_sound_manager.html#a787bfb6e53cecd35f5d5ff13377f5fcf', 1, '
    SoundManager']],
  ['removetexture', ['removeTexture', ['../class_texture_manager.html#ab845a8cb25c1773d41f293640b0bfc2a', 1, '
    TextureManager']],
  ['removetoinsertlater', ['removeToInsertLater', ['../navtree_8js.html#aa78016020f40c28356aefd325cd4df74', 1,
    'navtree.js']],
  ['removeviewport', ['removeViewport', ['../class_texture_manager.html#aa437fd6651b21facf9a9ab5a19e5fe54', 1,
    'TextureManager']],
  ['render', ['render', ['../class_game.html#a15ddd769261d923827a3cdf41499c843', 1, 'Game::render()'], ['
    ../class_game_over_state.html#a8c1dee88ec3505743033ad685b5d07cf', 1, 'GameOverState::render()'], ['
    ../class_game_state.html#acf2fa61a0f647a7563ea61de48bd445c', 1, 'GameState::render()'], ['
    ../class_game_state_machine.html#abfad06d5c6aa2f7d96a18e405f6d56c5', 1, 'GameStateMachine::render()'], ['
    ../class_menu_state.html#ad7afca66ece4ale7bad77828e4f39f3e', 1, 'MenuState::render()'], ['../class_pause_state.html#a9f4e2
    PauseState::render()'], ['../class_play_state.html#ad0b2654d0d822b853c6d06ee5c4a95c2', 1, 'PlayState::render()'], [
    '../class_setting_state.html#ade23556bc96502c5c32c18d77d9d97bf', 1, 'SettingState::render()'], ['
    ../class_texture.html#a9c17fab430aec359ecbb1da2d30ee729', 1, 'Texture::render()']]],
  ['requeststackclear', ['requestStackClear', ['../class_game_state.html#adc2d30de38b7feb912e97c916b817616', 1,
    'GameState']],
  ['requeststackpop', ['requestStackPop', ['../class_game_state.html#ad569d66f8d0865d27cd440fedd8b1e3f', 1, '
    GameState']],
  ['requeststackpush', ['requestStackPush', ['../class_game_state.html#a9c76fffe7f14ec73a043f494d60c65c0', 1, '
    GameState']],
  ['reset', ['reset', ['../class_input_manager.html#ae91e72df4d98cae96c2dbd7121150249', 1, '
    InputManager::reset()'], ['../class_net_message.html#a4d99c2a021cb3c61db21a37ec74efef7', 1, 'NetMessage::reset()']]],
  ['resize_2ejs', ['resize.js', ['../resize_8js.html', 1, ''']],
  ['resizeheight', ['resizeHeight', ['../resize_8js.html#a4bd3414bc1780222b192bcf33b645804', 1, 'resize.js']],
  ['resizewidth', ['resizeWidth', ['../resize_8js.html#a99942f5b5c75445364f2437051090367', 1, 'resize.js']],
  ['restorewidth', ['restoreWidth', ['../resize_8js.html#a517273f9259c941fd618dda7a901e6c2', 1, 'resize.js']],
  ['resumemusic', ['resumeMusic', ['../class_sound_manager.html#abd77ddeb149ae99524d536e0f6f47507', 1, '
    SoundManager']],
  ['right', ['RIGHT', ['
    ../_input_manager_8hpp.html#a7e5f61c59f658d9196d15f3b98f1e56eac8379af7490bb9eaaaf579cf17876f38', 1, 'InputManager.hpp']]
]
```

Definition at line 1 of file all\_12.js.

## 7.30 html/search/all\_13.js File Reference

### Variables

- var **searchData**
- all\_0 js

### 7.30.1 Variable Documentation

#### 7.30.1.1 all\_0.js

Definition at line 8 of file all\_13.js.

#### 7.30.1.2 var searchData

**Initial value:**

```
=
[
  ['sdl_5fframework', ['sdl_framework', ['../md_README.html', 1, '' ]]],
  ['screenSize', ['screenSize', ['../class_game_state.html#ad3423b81fc080ffed781f6b1221cf1da', 1, 'GameState' ]]],
  ['sdlflip', ['sdlFlip', ['../struct_image_asset.html#aa794dd8bc56cdfae4d4f708728a7fc2e', 1, 'ImageAsset::sdlFlip()' ], ['../struct_text_asset.html#a2de5b7f134ae22d520fd03156b7f01fb', 1, 'TextAsset::sdlFlip()' ], ['../struct_button.html#a1cbb461a9069ab71001f089acd4ce96c', 1, 'Button::sdlFlip()' ]]],
  ['search_2ejs', ['search.js', ['../search_8js.html', 1, '' ]]],
  ['searchbox', ['SearchBox', ['../search_8js.html#a52066106482f8136aa9e0ec859e8188f', 1, 'search.js' ]]],
  ['searchdata', ['searchData', ['../all__0_8js.html#ad01a7523f103d6242ef9b0451861231e', 1, 'searchData() :&#160
```

Definition at line 1 of file all\_13.js.

## 7.31 html/search/all\_14.js File Reference

### Variables

- var **searchData**

### 7.31.1 Variable Documentation

#### 7.31.1.1 var searchData

**Initial value:**

```
=
[
  ['tcpsocket', ['TcpSocket', ['../class_tcp_socket.html', 1, 'TcpSocket' ], ['../class_tcp_socket.html#a132aa72af141d611f8bad96ba585a79f', 1, 'TcpSocket::TcpSocket()' ]]],
  ['text'
```

Definition at line 1 of file all\_14.js.

## 7.32 html/search/all\_15.js File Reference

### Variables

- var **searchData**



## 7.32.1 Variable Documentation

### 7.32.1.1 var searchData

**Initial value:**

```
=
[
  ['unloadbytes', ['UnLoadBytes', ['../class_net_message.html#a36e10edc0ed83e8f26b8755d0179a242', 1, 'NetMessage']]],
  ['unpause', ['unpause', ['../class_timer.html#aa4dd50d7ed48ac73efed2950749d35d6', 1, 'Timer']]],
  ['update', ['update', ['../class_game.html#a79df6376b332d63c9eca0dcee30305c3', 1, 'Game::update()'], ['../class_game_object.html#ae83128d0e0efef691417779605ee037c', 1, 'GameObject::update()'], ['../class_game_over_state.html#a62c26d8c7622675df9512f6c81428b44', 1, 'GameOverState::update()'], ['../class_game_state.html#acb677f14e87d9c320e8090fb1889bc80', 1, 'GameState::update()'], ['../class_game_state_machine.html#a7a3be350727fff550f09cc0499398ece', 1, 'GameStateMachine::update()'], ['../class_input_manager.html#a86b038172871555da45606e20fa6bad7', 1, 'InputManager::update()'], ['../class_menu_button.html#a86b038172871555da45606e20fa6bad7', 1, 'MenuButton::update()'], ['../class_menu_state.html#a86b038172871555da45606e20fa6bad7', 1, 'MenuState::update()'], ['../class_pause_state.html#aa911e972a1c6da67aaa62c4be9aa03c9', 1, 'PauseState::update()'], ['../class_play_state.html#ac2b39807fbb6e77fcce0fa4caee106a2', 1, 'PlayState::update()'], ['../class_setting_state.html#alf5alf4587e55b3187438742d6848796', 1, 'SettingState::update()']]],
  ['updatestripes', ['updateStripes', ['../dynsections_8js.html#a8f7493ad859d4fbf2523917511ee7177', 1, 'dynsections.js']]]
]
```

Definition at line 1 of file all\_15.js.

## 7.33 html/search/all\_16.js File Reference

### Variables

- var **searchData**

### 7.33.1 Variable Documentation

#### 7.33.1.1 var searchData

Definition at line 1 of file all\_16.js.

## 7.34 html/search/all\_17.js File Reference

### Variables

- var **searchData**

### 7.34.1 Variable Documentation

#### 7.34.1.1 var searchData

**Initial value:**

```
=
[
  ['width', ['width', ['../class_game_object.html#a461647c775e04bffb85977084a196542', 1, 'GameObject']]],
  ['writecookie', ['writeCookie', ['../resize_8js.html#ad0822459a7d442b8c5e4db795d0aabb4', 1, 'resize.js']]],
  ['writing', ['WRITING', ['../class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97a0d6f9aa7a1d5756a47474d7c52839ac9', 1, 'NetMessage']]]
]
```

Definition at line 1 of file all\_17.js.

## 7.35 `html/search/all_18.js` File Reference

### Variables

- `var searchData`

### 7.35.1 Variable Documentation

#### 7.35.1.1 `var searchData`

##### Initial value:

```
=  
[  
  ['x', 'x', ['./struct_button.html#a2ec3bc40025b64b44319e7464164d61f', 1, 'Button']],  
  ['x1', 'x1', ['./struct_button.html#aedc881eba82814a7e6c62f3954b37665', 1, 'Button']],  
  ['x2', 'x2', ['./struct_button.html#af1cfe70765d31617c45a1cd42b1763c0', 1, 'Button']]  
]
```

Definition at line 1 of file `all_18.js`.

## 7.36 `html/search/all_19.js` File Reference

### Variables

- `var searchData`

### 7.36.1 Variable Documentation

#### 7.36.1.1 `var searchData`

##### Initial value:

```
=  
[  
  ['y', 'y', ['./struct_button.html#afff35ce0c47f662c3b096e5b644648a5', 1, 'Button']],  
  ['y1', 'y1', ['./struct_button.html#a8b5ebffd19ed6c1708092d568f684ca3', 1, 'Button']],  
  ['y2', 'y2', ['./struct_button.html#aaa0cda56851alad65816d1f6849d6c6f', 1, 'Button']]  
]
```

Definition at line 1 of file `all_19.js`.

## 7.37 `html/search/all_1a.js` File Reference

### Variables

- `var searchData`

### 7.37.1 Variable Documentation

#### 7.37.1.1 var searchData

**Initial value:**

```
=
[
  ['z', ['z', ['../jquery_8js.html#adc18d83abfd9f87d396e8fd6b6ac0fe1', 1, 'jquery.js']]]
]
```

Definition at line 1 of file all\_1a.js.

## 7.38 html/search/all\_1b.js File Reference

### Variables

- var **searchData**

### 7.38.1 Variable Documentation

#### 7.38.1.1 var searchData

**Initial value:**

```
=
[
  ['_7egameobject', ['~GameObject', ['../class_game_object.html#a224d4f6d9dd75c8a6f9d022eaf586fd9', 1, 'GameObject']]],
  ['_7emenubutton', ['~MenuButton', ['../class_menu_button.html#a2cf52c32c95ed42bd06117a30eefc5e0', 1, 'MenuButton']]],
  ['_7etcpsocket', ['~TcpSocket', ['../class_tcp_socket.html#a4c6d246451c51ac4226a9301f6711086', 1, 'TcpSocket']]],
  ['_7etexture', ['~Texture', ['../class_texture.html#a09c4bcb7462f64c1d20fa69dba3cee8a', 1, 'Texture']]],
  ['_7evector2d', ['~Vector2D', ['../class_vector2_d.html#ac0f819527d3966874c4c9bb72ab9f67e', 1, 'Vector2D']]]
]
```

Definition at line 1 of file all\_1b.js.

## 7.39 html/search/all\_2.js File Reference

### Variables

- var **searchData**
- **jquery js**

### 7.39.1 Variable Documentation

#### 7.39.1.1 jquery js

Definition at line 3 of file all\_2.js.

### 7.39.1.2 var searchData

**Initial value:**

```
=
[
  ['b', ['b', ['../class_game_object.html#a0c2fd0eb1c3abf030014b8b947dffcd9', 1, 'GameObject::b()'], ['
    ../struct_button.html#a24ce58cc0078e0839bc25fca5dbfd6f6', 1, 'Button::b()'], ['
    ../jquery_8js.html#aa4026ad5544b958e54ce5e106fa1c805', 1, 'b():&#160
```

Definition at line 1 of file all\_2.js.

## 7.40 html/search/all\_3.js File Reference

### Variables

- var **searchData**

### 7.40.1 Variable Documentation

#### 7.40.1.1 var searchData

Definition at line 1 of file all\_3.js.

## 7.41 html/search/all\_4.js File Reference

### Variables

- var **searchData**

### 7.41.1 Variable Documentation

#### 7.41.1.1 var searchData

**Initial value:**

```
=
[
  ['delay', ['delay', ['../class_game.html#a5d0dc9672a7a3e94204912acca84aac0', 1, 'Game']]],
  ['deletelink', ['deleteLink', ['../navtree_8js.html#abdf8e0e69c89803c1b84784a13b7fd2e', 1, 'navtree.js']]],
  ['destrect', ['destRect', ['../struct_image_asset.html#afc528fe2d4719f58c5edd35eb21d0ff5', 1, '
    ImageAsset::destRect()'], ['../struct_text_asset.html#aab94312b528991772b24aa329650234d', 1, 'TextAsset::destRect()'], ['
    ../struct_button.html#af906201d6bcb6a4a69ef2ec0c586fdd0', 1, 'Button::destRect()']]],
  ['draw', ['draw', ['../class_game_object.html#a59f11cba9071a39ba2f486a8364ed536', 1, 'GameObject::draw()'], ['
    ../class_menu_button.html#a3e854949b52808f9d6092e149a116f5c', 1, 'MenuButton::draw()']]],
  ['drawbox', ['drawBox', ['../class_texture_manager.html#ad4822032fld798b18b9a8be4c52762f3', 1, '
    TextureManager']]],
  ['drawcircle', ['drawCircle', ['../class_texture_manager.html#a07ab83a11c62921e68e0b61bce8a50d9', 1, '
    TextureManager']]],
  ['drawellipse', ['drawEllipse', ['../class_texture_manager.html#a88f2ec37ce6aea45053283a28d790359', 1, '
    TextureManager']]],
  ['drawtexture', ['drawTexture', ['../class_texture_manager.html#afdcf7e52a63c8edb79fe6169897020aa', 1, '
    TextureManager']]],
  ['dynsections_2ejs', ['dynsections.js', ['../dynsections_8js.html', 1, '']]
]
```

Definition at line 1 of file all\_4.js.

## 7.42 html/search/all\_5.js File Reference

### Variables

- var **searchData**

### 7.42.1 Variable Documentation

#### 7.42.1.1 var searchData

#### Initial value:

```
=
[
  ['each', ['each', ['../jquery_8js.html#a871ff39db627c54c710a3e9909b8234c', 1, 'jquery.js']]],
  ['empty', ['EMPTY', ['
    ../class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97a122c16aa3b80b2bfb34149f0bdaddbbc', 1, 'NetMessage']]],
  ['endtimer', ['endTimer', ['../class_system_time.html#a0b409b3645116fd98b8e4da6eb317bf6', 1, 'SystemTime']]],
  ['enums_5f0_2ejs', ['enums_0.js', ['../enums__0_8js.html', 1, '']],
  ['enums_5f1_2ejs', ['enums_1.js', ['../enums__1_8js.html', 1, '']],
  ['enums_5f2_2ejs', ['enums_2.js', ['../enums__2_8js.html', 1, '']],
  ['enums_5f3_2ejs', ['enums_3.js', ['../enums__3_8js.html', 1, '']],
  ['enums_5f4_2ejs', ['enums_4.js', ['../enums__4_8js.html', 1, '']],
  ['enumvalues_5f0_2ejs', ['enumvalues_0.js', ['../enumvalues__0_8js.html', 1, '']],
  ['enumvalues_5f1_2ejs', ['enumvalues_1.js', ['../enumvalues__1_8js.html', 1, '']],
  ['enumvalues_5f2_2ejs', ['enumvalues_2.js', ['../enumvalues__2_8js.html', 1, '']],
  ['enumvalues_5f3_2ejs', ['enumvalues_3.js', ['../enumvalues__3_8js.html', 1, '']],
  ['enumvalues_5f4_2ejs', ['enumvalues_4.js', ['../enumvalues__4_8js.html', 1, '']],
  ['enumvalues_5f5_2ejs', ['enumvalues_5.js', ['../enumvalues__5_8js.html', 1, '']],
  ['enumvalues_5f6_2ejs', ['enumvalues_6.js', ['../enumvalues__6_8js.html', 1, '']],
  ['enumvalues_5f7_2ejs', ['enumvalues_7.js', ['../enumvalues__7_8js.html', 1, '']],
  ['enumvalues_5f8_2ejs', ['enumvalues_8.js', ['../enumvalues__8_8js.html', 1, '']],
  ['enumvalues_5f9_2ejs', ['enumvalues_9.js', ['../enumvalues__9_8js.html', 1, '']],
  ['enumvalues_5fa_2ejs', ['enumvalues_a.js', ['../enumvalues__a_8js.html', 1, '']],
  ['enumvalues_5fb_2ejs', ['enumvalues_b.js', ['../enumvalues__b_8js.html', 1, '']],
  ['expandnode', ['expandNode', ['../navtree_8js.html#a4eb1f166c9d93b198e1621a4c787a412', 1, 'navtree.js']]],
  ['extend', ['extend', ['../jquery_8js.html#a5fb206c91c64d1be35fde236706eab86', 1, 'jquery.js']]
]
```

Definition at line 1 of file all\_5.js.

## 7.43 html/search/all\_6.js File Reference

### Variables

- var **searchData**

### 7.43.1 Variable Documentation

#### 7.43.1.1 var searchData

Definition at line 1 of file all\_6.js.

## 7.44 html/search/all\_7.js File Reference

### Variables

- var **searchData**
- search js

### 7.44.1 Variable Documentation

#### 7.44.1.1 search js

Definition at line 45 of file all\_7.js.

#### 7.44.1.2 var searchData

Definition at line 1 of file all\_7.js.

## 7.45 html/search/all\_8.js File Reference

### Variables

- var **searchData**
- all\_12 js

### 7.45.1 Variable Documentation

#### 7.45.1.1 all\_12 js

Definition at line 14 of file all\_8.js.

#### 7.45.1.2 var searchData

### Initial value:

```
=
[
  ['haltmusic', ['haltMusic', ['../class_sound_manager.html#afc5e7be51b78380ea6822186a4dec3f8', 1, '
    SoundManager']]],
  ['handleevents', ['handleEvents', ['../class_game.html#adb5563f62c0c82e3e42ec36501aa5698', 1, '
    Game::handleEvents()'], ['../class_game_over_state.html#a8ad921acf3f50ac0a32d7eb44ee25d74', 1, 'GameOverState::handleEvent
    '], ['../class_game_state.html#a84df5ae7ee8a0e5197b228e4006f4ae1', 1, 'GameState::handleEvents()'], ['
    ../class_game_state_machine.html#a88c902835786b8c1cc98902704cf2e0a', 1, 'GameStateMachine::handleEvents()'], ['
    ../class_menu_state.html#a8f28f6bc4955efcca31edb15351432ea', 1, 'MenuState::handleEvents()'], ['
    ../class_pause_state.html#a4a4c63c179c2010d80d042b5121408ff', 1, 'PauseState::handleEvents()'], ['
    ../class_play_state.html#a649b8c294d631ea9709f7261602dbaa2', 1, 'PlayState::handleEvents()'], ['
    ../class_setting_state.html#ae98f0759ee71daed7eb828cf45e2edec', 1, 'SettingState::handleEvents()']]],
  ['hashurl', ['hashUrl', ['../navtree_8js.html#a20695277530a1a04eef8d289177a5e40', 1, 'navtree.js']],
  ['hashvalue', ['hashValue', ['../navtree_8js.html#aaeb20639619e1371c030d36a7109b27b', 1, 'navtree.js']],
  ['hastexture', ['hasTexture', ['../class_texture_manager.html#ab0e81c27dc87fde20e2ec4744996034f', 1, '
    TextureManager']]],
  ['header', ['header', ['../resize_8js.html#af920c2a7d4f4b5a962fe8e11257f871d', 1, 'resize.js']],
  ['height', ['height', ['../class_game_object.html#ae94d98451fb4345860810660a17b487b', 1, 'GameObject']],
  ['hierarchy', ['hierarchy', ['../hierarchy_8js.html#ad9447ad30669c42ccb861cbe36a18f6b', 1, 'hierarchy.js']],
  ['hierarchy_2ejs', ['hierarchy.js', ['../hierarchy_8js.html', 1, '']],
  ['highlightanchor', ['highlightAnchor', ['../navtree_8js.html#a524fa9bfd80c70bf3a84696b2077eadb', 1, '
    navtree.js']],
  ['hostsocket', ['HostSocket', ['../class_host_socket.html', 1, 'HostSocket'], ['
    ../class_host_socket.html#ae4ca42ef572b22df304676c1a0934475', 1, 'HostSocket::HostSocket(_IpAddress &the_ip_address)',
    ../class_host_socket.html#ae0e3dfc6ac4a96dad8880558ff9b5519', 1, 'HostSocket::HostSocket(Uint16 port)']],
  ['hpp', ['hpp', ['../all_12_8js.html#a9b3a14028c4ac90d2d427bf5496d99b6', 1, 'hpp():&#160
```

Definition at line 1 of file all\_8.js.

## 7.46 html/search/all\_9.js File Reference

### Variables

- var **searchData**
- jquery **js**

### 7.46.1 Variable Documentation

#### 7.46.1.1 jquery js

Definition at line 3 of file all\_9.js.

#### 7.46.1.2 var searchData

##### Initial value:

```
=  
[  
  ['if', ['if', ['../jquery_8js.html#a9db6d45a025ad692282fe23e69eeba43', 1, 'if(!b.support.opacity):&#160
```

Definition at line 1 of file all\_9.js.

## 7.47 html/search/all\_a.js File Reference

### Variables

- var **searchData**

### 7.47.1 Variable Documentation

#### 7.47.1.1 var searchData

##### Initial value:

```
=  
[  
  ['joysticksinitialised', ['joysticksInitialised', [  
    ../class_input_manager.html#a9db6d45a025ad692282fe23e69eeba43', 1, 'InputManager' ]]],  
  ['jquery_2ejs', ['jquery.js', ['../jquery_8js.html', 1, '' ]]]  
]
```

Definition at line 1 of file all\_a.js.

## 7.48 html/search/all\_b.js File Reference

### Variables

- var **searchData**

### 7.48.1 Variable Documentation

#### 7.48.1.1 var searchData

##### Initial value:

```
=
[
  ['k', ['k', ['../jquery_8js.html#ab26645c014aa005ecedef329ecf58c99', 1, 'jquery.js']]]
]
```

Definition at line 1 of file all\_b.js.

## 7.49 html/search/all\_c.js File Reference

### Variables

- var **searchData**

### 7.49.1 Variable Documentation

#### 7.49.1.1 var searchData

##### Initial value:

```
=
[
  ['l', ['L', ['../jquery_8js.html#a38ee4c0b5f4fe2a18d0c783af540d253', 1, 'jquery.js']]],
  ['left', ['LEFT', ['../_input_manager_8hpp.html#a7e5f61c59f658d9196d15f3b98f1e56eadb45120aafd37a973140edee24708065', 1, 'InputManager.hpp']]],
  ['load', ['load', ['../class_sound_manager.html#a34e4bc3aaf5970c9a46d12ae56bc5686', 1, 'SoundManager']]],
  ['loadbytes', ['LoadBytes', ['../class_net_message.html#a91162f126a7d3f2b629665a234cd4629', 1, 'NetMessage']]],
  ['loadcolor', ['loadColor', ['../class_texture_manager.html#a2ea52673d624a2d4631c6faccd51b9e2', 1, 'TextureManager']]],
  ['loadfont', ['loadFont', ['../class_texture_manager.html#a61a38ba29398b32e7163dd42c2c95e54', 1, 'TextureManager']]],
  ['loadfromfile', ['loadFromFile', ['../class_texture.html#a9e82c3960a089fa1001149e1dd30ce61', 1, 'Texture']]],
  ['loadfromrenderedtext', ['loadFromRenderedText', ['../class_texture.html#a2923e8eeb0309ccd0e797ec028b280ce', 1, 'Texture']]],
  ['loadimagetexture', ['loadImageTexture', ['../class_texture_manager.html#ae35b624ac5ef3d27553e5a4126d37fad', 1, 'TextureManager']]],
  ['loadtexttexture', ['loadTextTexture', ['../class_texture_manager.html#a576b678e6e94d2a69756890cc1841c67', 1, 'TextureManager']]],
  ['localstoragesupported', ['localStorageSupported', ['../navtree_8js.html#ac49af616f532f2364be9f58280469d33', 1, 'navtree.js']]],
  ['logfile', ['Logfile', ['../class_logfile.html', 1, '']],
  ['logfile_2ecpp', ['Logfile.cpp', ['../_logfile_8cpp.html', 1, '']],
  ['logfile_2ehpp', ['Logfile.hpp', ['../_logfile_8hpp.html', 1, '']]
]
```

Definition at line 1 of file all\_c.js.



## 7.50 html/search/all\_d.js File Reference

### Variables

- var **searchData**

### 7.50.1 Variable Documentation

#### 7.50.1.1 var searchData

##### Initial value:

```
=
[
  ['m_5fsocket', ['m_Socket', ['../class_tcp_socket.html#a7c08ca662d111a1d8c9419bb2654b2c3', 1, 'TcpSocket']]],
  ['main']
]
```

Definition at line 1 of file all\_d.js.

## 7.51 html/search/all\_e.js File Reference

### Variables

- var **searchData**
- **resize js**

### 7.51.1 Variable Documentation

#### 7.51.1.1 resize js

Definition at line 5 of file all\_e.js.

#### 7.51.1.2 var searchData

##### Initial value:

```
=
[
  ['name', ['name', ['../class_game_state.html#aecelf40d0d84c629ef4f3bb1d1a952f6', 1, 'GameState']]],
  ['navto', ['navTo', ['../navtree_8js.html#a21beb601032fff375100a907f32129a5', 1, 'navtree.js']]],
  ['navtree', ['navtree', ['../resize_8js.html#a711d37a3374012d4f6060fffe0abea55', 1, 'navtree():&#160']]]
]
```

Definition at line 1 of file all\_e.js.

## 7.52 html/search/all\_f.js File Reference

### Variables

- var **searchData**

### 7.52.1 Variable Documentation

#### 7.52.1.1 var searchData

##### Initial value:

```
=
[
  ['ok', ['Ok', ['../class___ip_address.html#a3b67d23e404b69e2a06b82bb977226a6', 1, '_IpAddress::Ok()'], ['
    ../class_tcp_socket.html#a15ef8d2fb3a7a1aaac272036d407f9d2', 1, 'TcpSocket::Ok()']],
  ['onenter', ['onEnter', ['../class_game_over_state.html#aa584dc013bffbfb73825347d46accdcf', 1, '
    GameState::onEnter()'], ['../class_game_state.html#ae09dc3c714b03c30fcc15c147e409554', 1, 'GameState::onEnter()'], ['
    ../class_menu_state.html#af7c088f1da275c5ff09025bb50f4c4ab', 1, 'MenuState::onEnter()'], ['
    ../class_pause_state.html#a792d7f851080b5dcb0df5bd6b4974fde', 1, 'PauseState::onEnter()'], ['
    ../class_play_state.html#aadb7d2bfee8e0b74e7d96bcc4616601b', 1, 'PlayState::onEnter()'], ['../class_setting_state.html#a41
    1, 'SettingState::onEnter()']],
  ['onexit', ['onExit', ['../class_game_over_state.html#ac36b6abddf2d30cc52fc912ad69bba5b', 1, '
    GameState::onExit()'], ['../class_game_state.html#a6e3e8872466d4eda59c8860c99b8350d', 1, 'GameState::onExit()'], ['
    ../class_menu_state.html#a7ff1d1ca0d3c03592a737673647406ca', 1, 'MenuState::onExit()'], ['
    ../class_pause_state.html#a5a5315c115ba23beb4c03137cca947a3', 1, 'PauseState::onExit()'], ['
    ../class_play_state.html#aed7fef037f6e9c9fc4a02924e2fe7154', 1, 'PlayState::onExit()'], ['../class_setting_state.html#a513
    SettingState::onExit()']],
  ['onready', ['OnReady', ['../class_tcp_socket.html#a6adda9d1772811c201475d3c8ef0d13e', 1, '
    TcpSocket::OnReady()'], ['../class_host_socket.html#a33d0e87a996be6b86e92991525b2b683', 1, 'HostSocket::OnReady()'], ['
    ../class_client_socket.html#ab13fc0ce771ec240e349b37b7ec83de5', 1, 'ClientSocket::OnReady()']]
]
```

Definition at line 1 of file all\_f.js.

## 7.53 html/search/classes\_0.js File Reference

### Variables

- var **searchData**

### 7.53.1 Variable Documentation

#### 7.53.1.1 var searchData

##### Initial value:

```
=
[
  ['_5fipaddress', ['_IpAddress', ['../class___ip_address.html', 1, '']]
]
```

Definition at line 1 of file classes\_0.js.

## 7.54 html/search/classes\_1.js File Reference

### Variables

- var **searchData**

#### 7.54.1 Variable Documentation

##### 7.54.1.1 var searchData

###### Initial value:

```
=  
[  
  ['button', ['Button', ['../struct_button.html', 1, '']]]  
]
```

Definition at line 1 of file classes\_1.js.

## 7.55 html/search/classes\_2.js File Reference

### Variables

- var **searchData**

#### 7.55.1 Variable Documentation

##### 7.55.1.1 var searchData

###### Initial value:

```
=  
[  
  ['clientsocket', ['ClientSocket', ['../class_client_socket.html', 1, '']]]  
]
```

Definition at line 1 of file classes\_2.js.

## 7.56 html/search/classes\_3.js File Reference

### Variables

- var **searchData**

## 7.56.1 Variable Documentation

### 7.56.1.1 var searchData

**Initial value:**

```
=  
[  
  ['game', ['Game', ['../class_game.html', 1, '']]],  
  ['gameobject', ['GameObject', ['../class_game_object.html', 1, '']]],  
  ['gameoverstate', ['GameOverState', ['../class_game_over_state.html', 1, '']]],  
  ['gamestate', ['GameState', ['../class_game_state.html', 1, '']]],  
  ['gamestatemachine', ['GameStateMachine', ['../class_game_state_machine.html', 1, '']]],  
  ['gfxasset', ['GFXAsset', ['../struct_g_f_x_asset.html', 1, '']]]  
]
```

Definition at line 1 of file classes\_3.js.

## 7.57 html/search/classes\_4.js File Reference

### Variables

- var **searchData**

### 7.57.1 Variable Documentation

#### 7.57.1.1 var searchData

**Initial value:**

```
=  
[  
  ['hostsocket', ['HostSocket', ['../class_host_socket.html', 1, '']]]  
]
```

Definition at line 1 of file classes\_4.js.

## 7.58 html/search/classes\_5.js File Reference

### Variables

- var **searchData**

## 7.58.1 Variable Documentation

### 7.58.1.1 var searchData

#### Initial value:

```
=  
[  
  ['imageasset', ['ImageAsset', ['../struct_image_asset.html', 1, '']]],  
  ['inputmanager', ['InputManager', ['../class_input_manager.html', 1, '']]]  
]
```

Definition at line 1 of file classes\_5.js.

## 7.59 html/search/classes\_6.js File Reference

### Variables

- var **searchData**

## 7.59.1 Variable Documentation

### 7.59.1.1 var searchData

#### Initial value:

```
=  
[  
  ['logfile', ['Logfile', ['../class_logfile.html', 1, '']]]  
]
```

Definition at line 1 of file classes\_6.js.

## 7.60 html/search/classes\_7.js File Reference

### Variables

- var **searchData**

## 7.60.1 Variable Documentation

### 7.60.1.1 var searchData

#### Initial value:

```
=  
[  
  ['menubutton', ['MenuButton', ['../class_menu_button.html', 1, '']]],  
  ['menustate', ['MenuState', ['../class_menu_state.html', 1, '']]]  
]
```

Definition at line 1 of file classes\_7.js.

## 7.61 [html/search/classes\\_8.js](#) File Reference

### Variables

- var **searchData**

#### 7.61.1 Variable Documentation

##### 7.61.1.1 var searchData

###### Initial value:

```
=  
[  
  ['net', ['Net', ['./class_net.html', 1, '']]],  
  ['netmessage', ['NetMessage', ['./class_net_message.html', 1, '']]]  
]
```

Definition at line 1 of file [classes\\_8.js](#).

## 7.62 [html/search/classes\\_9.js](#) File Reference

### Variables

- var **searchData**

#### 7.62.1 Variable Documentation

##### 7.62.1.1 var searchData

###### Initial value:

```
=  
[  
  ['pausestate', ['PauseState', ['./class_pause_state.html', 1, '']]],  
  ['playstate', ['PlayState', ['./class_play_state.html', 1, '']]]  
]
```

Definition at line 1 of file [classes\\_9.js](#).

## 7.63 [html/search/classes\\_a.js](#) File Reference

### Variables

- var **searchData**

### 7.63.1 Variable Documentation

#### 7.63.1.1 var searchData

**Initial value:**

```
=
[
  ['settingstate', ['SettingState', ['../class_setting_state.html', 1, '']]],
  ['soundmanager', ['SoundManager', ['../class_sound_manager.html', 1, '']]],
  ['systemtime', ['SystemTime', ['../class_system_time.html', 1, '']]]
]
```

Definition at line 1 of file classes\_a.js.

## 7.64 html/search/classes\_b.js File Reference

### Variables

- var **searchData**

### 7.64.1 Variable Documentation

#### 7.64.1.1 var searchData

**Initial value:**

```
=
[
  ['tcpsocket', ['TcpSocket', ['../class_tcp_socket.html', 1, '']]],
  ['textasset', ['TextAsset', ['../struct_text_asset.html', 1, '']]],
  ['texture', ['Texture', ['../class_texture.html', 1, '']]],
  ['texturemanager', ['TextureManager', ['../class_texture_manager.html', 1, '']]],
  ['timer', ['Timer', ['../class_timer.html', 1, '']]]
]
```

Definition at line 1 of file classes\_b.js.

## 7.65 html/search/classes\_c.js File Reference

### Variables

- var **searchData**

## 7.65.1 Variable Documentation

### 7.65.1.1 var searchData

**Initial value:**

```
=
[
  ['vector2d', ['Vector2D', ['../class_vector2_d.html', 1, '' ]]],
  ['viewport', ['Viewport', ['../struct_viewport.html', 1, '' ]]]
]
```

Definition at line 1 of file classes\_c.js.

## 7.66 html/search/enums\_0.js File Reference

### Variables

- var **searchData**

## 7.66.1 Variable Documentation

### 7.66.1.1 var searchData

**Initial value:**

```
=
[
  ['bufstates', ['bufstates', ['../class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97', 1, 'NetMessage' ]]]
]
```

Definition at line 1 of file enums\_0.js.

## 7.67 html/search/enums\_1.js File Reference

### Variables

- var **searchData**

## 7.67.1 Variable Documentation

### 7.67.1.1 var searchData

**Initial value:**

```
=
[
  ['flip', ['FLIP', ['../_common_enums_8hpp.html#a996afc83d9898beed790376b4895cada', 1, 'CommonEnums.hpp' ]]]
]
```

Definition at line 1 of file enums\_1.js.



## 7.68 html/search/enums\_2.js File Reference

### Variables

- var **searchData**

#### 7.68.1 Variable Documentation

##### 7.68.1.1 var searchData

##### Initial value:

```
=  
[  
  ['mouse_5fbuttons', ['mouse_buttons', ['../_input_manager_8hpp.html#a7e5f61c59f658d9196d15f3b98f1e56e', 1, '  
    InputManager.hpp' ]]]  
]
```

Definition at line 1 of file enums\_2.js.

## 7.69 html/search/enums\_3.js File Reference

### Variables

- var **searchData**

#### 7.69.1 Variable Documentation

##### 7.69.1.1 var searchData

##### Initial value:

```
=  
[  
  ['soundtype', ['SoundType', ['../_sound_manager_8hpp.html#ad2af16bf27c1b83797f1c32686caf1a3', 1, '  
    SoundManager.hpp' ]]],  
  ['stateaction', ['StateAction', ['../_common_enums_8hpp.html#af8d0f0dbb1f549d8a9e8a69ba88ef9b9', 1, '  
    CommonEnums.hpp' ]]],  
  ['states', ['States', ['../_common_enums_8hpp.html#a808e5cd4979462d3bbe3070d7d147444', 1, 'CommonEnums.hpp' ]]]  
]
```

Definition at line 1 of file enums\_3.js.

## 7.70 html/search/enums\_4.js File Reference

### Variables

- var **searchData**
- CommonEnums **hpp**

### 7.70.1 Variable Documentation

#### 7.70.1.1 CommonEnums.hpp

Definition at line 3 of file enums\_4.js.

#### 7.70.1.2 var searchData

**Initial value:**

```
=
[
  ['textquality', ['TEXTQUALITY', ['../_common_enums_8hpp.html#a85066eb1ab6408f4fa53399bb9b328e1', 1, '
    TEXTQUALITY() :&#160
```

Definition at line 1 of file enums\_4.js.

## 7.71 html/search/enumvalues\_0.js File Reference

### Variables

- var **searchData**
- **Texture.hpp**

### 7.71.1 Variable Documentation

#### 7.71.1.1 Texture.hpp

Definition at line 3 of file enumvalues\_0.js.

#### 7.71.1.2 var searchData

**Initial value:**

```
=
[
  ['blended', ['BLENDED', ['
    ../_texture_8hpp.html#a6d7a4a6c659ea62d6e2b9ced264c47cfa2dddf3d92f4ebca37b63bfd88f337f3a', 1, 'BLENDED() :&#160
```

Definition at line 1 of file enumvalues\_0.js.

## 7.72 html/search/enumvalues\_1.js File Reference

### Variables

- var **searchData**

## 7.72.1 Variable Documentation

### 7.72.1.1 var searchData

#### Initial value:

```
=  
[  
  ['clear', ['Clear', [  
    ../_common_enums_8hpp.html#af8d0f0dbb1f549d8a9e8a69ba88ef9b9adc30bc0c7914db5918da4263fce93ad2', 1, 'CommonEnums.hpp' ] ]]  
]
```

Definition at line 1 of file enumvalues\_1.js.

## 7.73 html/search/enumvalues\_2.js File Reference

### Variables

- var **searchData**

## 7.73.1 Variable Documentation

### 7.73.1.1 var searchData

#### Initial value:

```
=  
[  
  ['empty', ['EMPTY', [  
    ../class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97a122c16aa3b80b2bfb34149f0bdaddbbc', 1, 'NetMessage' ] ]]  
]
```

Definition at line 1 of file enumvalues\_2.js.

## 7.74 html/search/enumvalues\_3.js File Reference

### Variables

- var **searchData**

## 7.74.1 Variable Documentation

### 7.74.1.1 var searchData

#### Initial value:

```
=  
[  
  ['flip_5fhorizontal', ['FLIP_HORIZONTAL', [  
    ../_common_enums_8hpp.html#a996afc83d9898beed790376b4895cadaa23b98cb24af21636cc83133ddbeea52d', 1, 'CommonEnums.hpp' ] ]],  
  ['flip_5fvertical', ['FLIP_VERTICAL', [  
    ../_common_enums_8hpp.html#a996afc83d9898beed790376b4895cadaabb1843a9e71dce3e31d14fd0ea18d1c5', 1, 'CommonEnums.hpp' ] ]],  
  ['full', ['FULL', [  
    ../class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97ae31961e4d3c3c4f67f523cabb4d0877d', 1, 'NetMessage' ] ]]  
]
```

Definition at line 1 of file enumvalues\_3.js.

## 7.75 html/search/enumvalues\_4.js File Reference

### Variables

- var **searchData**

#### 7.75.1 Variable Documentation

##### 7.75.1.1 var searchData

###### Initial value:

```
=  
[  
  ['gameover', ['GameOver', [  
    ../_common_enums_8hpp.html#a808e5cd4979462d3bbe3070d7d147444a8f347bc7cebca9fa6d97e70c6bc29eb3', 1, 'CommonEnums.hpp' ] ] ]  
]
```

Definition at line 1 of file enumvalues\_4.js.

## 7.76 html/search/enumvalues\_5.js File Reference

### Variables

- var **searchData**

#### 7.76.1 Variable Documentation

##### 7.76.1.1 var searchData

###### Initial value:

```
=  
[  
  ['left', ['LEFT', [  
    ../_input_manager_8hpp.html#a7e5f61c59f658d9196d15f3b98f1e56eadb45120aafd37a973140edee24708065', 1, 'InputManager.hpp' ] ] ]  
]
```

Definition at line 1 of file enumvalues\_5.js.

## 7.77 html/search/enumvalues\_6.js File Reference

### Variables

- var **searchData**

## 7.77.1 Variable Documentation

### 7.77.1.1 var searchData

**Initial value:**

```
=
[
  ['menu', ['Menu', ['
    ../_common_enums_8hpp.html#a808e5cd4979462d3bbe3070d7d147444ab61541208db7fa7dba42c85224405911', 1, 'CommonEnums.hpp' ] ]],
  ['middle', ['MIDDLE', ['
    ../_input_manager_8hpp.html#a7e5f61c59f658d9196d15f3b98f1e56ea1a2710fb8b50ea593b207d1e79fea574', 1, 'InputManager.hpp' ] ]]]
]
```

Definition at line 1 of file enumvalues\_6.js.

## 7.78 html/search/enumvalues\_7.js File Reference

### Variables

- var **searchData**
- CommonEnums **hpp**

## 7.78.1 Variable Documentation

### 7.78.1.1 CommonEnums hpp

Definition at line 3 of file enumvalues\_7.js.

### 7.78.1.2 var searchData

**Initial value:**

```
=
[
  ['none', ['NONE', ['
    ../_common_enums_8hpp.html#a996afc83d9898beed790376b4895cadaab50339a10e1de285ac99d4c3990b8693', 1, 'NONE() :&#160

```

Definition at line 1 of file enumvalues\_7.js.

## 7.79 html/search/enumvalues\_8.js File Reference

### Variables

- var **searchData**

## 7.79.1 Variable Documentation

### 7.79.1.1 var searchData

**Initial value:**

```
=  
[  
  ['pause', ['Pause', [  
    ../_common_enums_8hpp.html#a808e5cd4979462d3bbe3070d7d147444a105b296a83f9c105355403f3332af50f', 1, 'CommonEnums.hpp' ] ] ],  
  ['play'
```

Definition at line 1 of file enumvalues\_8.js.

## 7.80 html/search/enumvalues\_9.js File Reference

### Variables

- var **searchData**

## 7.80.1 Variable Documentation

### 7.80.1.1 var searchData

**Initial value:**

```
=  
[  
  ['reading', ['READING', [  
    ../_class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97a56564a3fb85ec411a20ac99ad0a559df', 1, 'NetMessage' ] ] ],  
  ['right', ['RIGHT', [  
    ../_input_manager_8hpp.html#a7e5f61c59f658d9196d15f3b98f1e56eaec8379af7490bb9eaaf579cf17876f38', 1, 'InputManager.hpp' ] ] ],  
]  
]
```

Definition at line 1 of file enumvalues\_9.js.

## 7.81 html/search/enumvalues\_a.js File Reference

### Variables

- var **searchData**
- **Texture** hpp

## 7.81.1 Variable Documentation

### 7.81.1.1 Texture hpp

Definition at line 4 of file enumvalues\_a.js.

## 7.81.1.2 var searchData

## Initial value:

```
=
[
  ['setting', ['Setting', ['
    ../_common_enums_8hpp.html#a808e5cd4979462d3bbe3070d7d147444a51ac4bf63a0c6a9cefa7ba69b4154ef1', 1, 'CommonEnums.hpp' ]]],
  ['shaded', ['SHADED', ['
    ../_texture_8hpp.html#a6d7a4a6c659ea62d6e2b9ced264c47cfa77318c24e5a293d45a0284198b1ffe8f', 1, 'SHADED() :&#160
```

Definition at line 1 of file enumvalues\_a.js.

## 7.82 html/search/enumvalues\_b.js File Reference

## Variables

- var **searchData**

## 7.82.1 Variable Documentation

## 7.82.1.1 var searchData

## Initial value:

```
=
[
  ['writing', ['WRITING', ['
    ../class_net_message.html#a09aaa79b19ae071bd3fecfe5f90b0f97a0d6f9aa7a1d5756a47474d7c52839ac9', 1, 'NetMessage' ]]]
]
```

Definition at line 1 of file enumvalues\_b.js.

## 7.83 html/search/files\_0.js File Reference

## Variables

- var **searchData**

## 7.83.1 Variable Documentation

## 7.83.1.1 var searchData

## Initial value:

```
=
[
  ['_5fcommon_5fenums_5f8hpp_2ejs', ['_common_enums_8hpp.js', ['../_common_enums__8hpp_8js.html', 1, '' ]]],
  ['_5finput_5fmanager_5f8hpp_2ejs', ['_input_manager_8hpp.js', ['../_input__manager__8hpp_8js.html', 1, '' ]]],
  ['_5fnet_5f8hpp_2ejs', ['_net_8hpp.js', ['../_net__8hpp_8js.html', 1, '' ]]],
  ['_5fsound_5fmanager_5f8hpp_2ejs', ['_sound_manager_8hpp.js', ['../_sound__manager__8hpp_8js.html', 1, '' ]]],
  ['_5ftexture_5f8hpp_2ejs', ['_texture_8hpp.js', ['../_texture__8hpp_8js.html', 1, '' ]]]
]
```

Definition at line 1 of file files\_0.js.

## 7.84 [html/search/files\\_1.js](#) File Reference

### Variables

- var **searchData**

### 7.84.1 Variable Documentation

#### 7.84.1.1 var searchData

Definition at line 1 of file [files\\_1.js](#).

## 7.85 [html/search/files\\_10.js](#) File Reference

### Variables

- var **searchData**

### 7.85.1 Variable Documentation

#### 7.85.1.1 var searchData

#### Initial value:

```
=
[
  ['texture_2ecpp', ['Texture.cpp', ['../_texture_8cpp.html', 1, '']]],
  ['texture_2ehpp', ['Texture.hpp', ['../_texture_8hpp.html', 1, '']]],
  ['texturemanager_2ecpp', ['TextureManager.cpp', ['../_texture_manager_8cpp.html', 1, '']]],
  ['texturemanager_2ehpp', ['TextureManager.hpp', ['../_texture_manager_8hpp.html', 1, '']]],
  ['timer_2ecpp', ['Timer.cpp', ['../_timer_8cpp.html', 1, '']]],
  ['timer_2ehpp', ['Timer.hpp', ['../_timer_8hpp.html', 1, '']]],
  ['typedefs_5f0_2ejs', ['typedefs_0.js', ['../typedefs__0_8js.html', 1, '']]]
]
```

Definition at line 1 of file [files\\_10.js](#).

## 7.86 [html/search/files\\_11.js](#) File Reference

### Variables

- var **searchData**



## 7.86.1 Variable Documentation

### 7.86.1.1 var searchData

Initial value:

```
=
[
  ['variables_5f0_2ejs', ['variables_0.js', ['../variables__0_8js.html', 1, '']]],
  ['variables_5f1_2ejs', ['variables_1.js', ['../variables__1_8js.html', 1, '']]],
  ['variables_5f10_2ejs', ['variables_10.js', ['../variables__10_8js.html', 1, '']]],
  ['variables_5f11_2ejs', ['variables_11.js', ['../variables__11_8js.html', 1, '']]],
  ['variables_5f12_2ejs', ['variables_12.js', ['../variables__12_8js.html', 1, '']]],
  ['variables_5f13_2ejs', ['variables_13.js', ['../variables__13_8js.html', 1, '']]],
  ['variables_5f14_2ejs', ['variables_14.js', ['../variables__14_8js.html', 1, '']]],
  ['variables_5f15_2ejs', ['variables_15.js', ['../variables__15_8js.html', 1, '']]],
  ['variables_5f2_2ejs', ['variables_2.js', ['../variables__2_8js.html', 1, '']]],
  ['variables_5f3_2ejs', ['variables_3.js', ['../variables__3_8js.html', 1, '']]],
  ['variables_5f4_2ejs', ['variables_4.js', ['../variables__4_8js.html', 1, '']]],
  ['variables_5f5_2ejs', ['variables_5.js', ['../variables__5_8js.html', 1, '']]],
  ['variables_5f6_2ejs', ['variables_6.js', ['../variables__6_8js.html', 1, '']]],
  ['variables_5f7_2ejs', ['variables_7.js', ['../variables__7_8js.html', 1, '']]],
  ['variables_5f8_2ejs', ['variables_8.js', ['../variables__8_8js.html', 1, '']]],
  ['variables_5f9_2ejs', ['variables_9.js', ['../variables__9_8js.html', 1, '']]],
  ['variables_5fa_2ejs', ['variables_a.js', ['../variables__a_8js.html', 1, '']]],
  ['variables_5fb_2ejs', ['variables_b.js', ['../variables__b_8js.html', 1, '']]],
  ['variables_5fc_2ejs', ['variables_c.js', ['../variables__c_8js.html', 1, '']]],
  ['variables_5fd_2ejs', ['variables_d.js', ['../variables__d_8js.html', 1, '']]],
  ['variables_5fe_2ejs', ['variables_e.js', ['../variables__e_8js.html', 1, '']]],
  ['variables_5ff_2ejs', ['variables_f.js', ['../variables__f_8js.html', 1, '']]],
  ['vector2d_2ecpp', ['Vector2D.cpp', ['../_vector2_d_8cpp.html', 1, '']]],
  ['vector2d_2ehpp', ['Vector2D.hpp', ['../_vector2_d_8hpp.html', 1, '']]],
  ['viewport_2ehpp', ['Viewport.hpp', ['../_viewport_8hpp.html', 1, '']]]
]
```

Definition at line 1 of file files\_11.js.

## 7.87 html/search/files\_2.js File Reference

### Variables

- var **searchData**

### 7.87.1 Variable Documentation

#### 7.87.1.1 var searchData

Definition at line 1 of file files\_2.js.

## 7.88 html/search/files\_3.js File Reference

### Variables

- var **searchData**

## 7.88.1 Variable Documentation

### 7.88.1.1 var searchData

**Initial value:**

```
=
[
  ['dynsections_2ejs', ['dynsections.js', ['../dynsections_8js.html', 1, '']]]
]
```

Definition at line 1 of file files\_3.js.

## 7.89 html/search/files\_4.js File Reference

### Variables

- var **searchData**

## 7.89.1 Variable Documentation

### 7.89.1.1 var searchData

**Initial value:**

```
=
[
  ['enums_5f0_2ejs', ['enums_0.js', ['../enums__0_8js.html', 1, '']]],
  ['enums_5f1_2ejs', ['enums_1.js', ['../enums__1_8js.html', 1, '']]],
  ['enums_5f2_2ejs', ['enums_2.js', ['../enums__2_8js.html', 1, '']]],
  ['enums_5f3_2ejs', ['enums_3.js', ['../enums__3_8js.html', 1, '']]],
  ['enums_5f4_2ejs', ['enums_4.js', ['../enums__4_8js.html', 1, '']]],
  ['enumvalues_5f0_2ejs', ['enumvalues_0.js', ['../enumvalues__0_8js.html', 1, '']]],
  ['enumvalues_5f1_2ejs', ['enumvalues_1.js', ['../enumvalues__1_8js.html', 1, '']]],
  ['enumvalues_5f2_2ejs', ['enumvalues_2.js', ['../enumvalues__2_8js.html', 1, '']]],
  ['enumvalues_5f3_2ejs', ['enumvalues_3.js', ['../enumvalues__3_8js.html', 1, '']]],
  ['enumvalues_5f4_2ejs', ['enumvalues_4.js', ['../enumvalues__4_8js.html', 1, '']]],
  ['enumvalues_5f5_2ejs', ['enumvalues_5.js', ['../enumvalues__5_8js.html', 1, '']]],
  ['enumvalues_5f6_2ejs', ['enumvalues_6.js', ['../enumvalues__6_8js.html', 1, '']]],
  ['enumvalues_5f7_2ejs', ['enumvalues_7.js', ['../enumvalues__7_8js.html', 1, '']]],
  ['enumvalues_5f8_2ejs', ['enumvalues_8.js', ['../enumvalues__8_8js.html', 1, '']]],
  ['enumvalues_5f9_2ejs', ['enumvalues_9.js', ['../enumvalues__9_8js.html', 1, '']]],
  ['enumvalues_5fa_2ejs', ['enumvalues_a.js', ['../enumvalues__a_8js.html', 1, '']]],
  ['enumvalues_5fb_2ejs', ['enumvalues_b.js', ['../enumvalues__b_8js.html', 1, '']]]
]
```

Definition at line 1 of file files\_4.js.

## 7.90 html/search/files\_5.js File Reference

### Variables

- var **searchData**

## 7.90.1 Variable Documentation

### 7.90.1.1 var searchData

Definition at line 1 of file files\_5.js.

## 7.91 html/search/files\_6.js File Reference

### Variables

- var **searchData**

## 7.91.1 Variable Documentation

### 7.91.1.1 var searchData

#### Initial value:

```
=
[
  ['game_2ecpp', ['Game.cpp', ['../_game_8cpp.html', 1, '']]],
  ['game_2ehpp', ['Game.hpp', ['../_game_8hpp.html', 1, '']]],
  ['gameobject_2ehpp', ['GameObject.hpp', ['../_game_object_8hpp.html', 1, '']]],
  ['gameoverstate_2ecpp', ['GameOverState.cpp', ['../_game_over_state_8cpp.html', 1, '']]],
  ['gameoverstate_2ehpp', ['GameOverState.hpp', ['../_game_over_state_8hpp.html', 1, '']]],
  ['gamestate_2ecpp', ['GameState.cpp', ['../_game_state_8cpp.html', 1, '']]],
  ['gamestate_2ehpp', ['GameState.hpp', ['../_game_state_8hpp.html', 1, '']]],
  ['gamestatemachine_2ecpp', ['GameStateMachine.cpp', ['../_game_state_machine_8cpp.html', 1, '']]],
  ['gamestatemachine_2ehpp', ['GameStateMachine.hpp', ['../_game_state_machine_8hpp.html', 1, '']]]
]
```

Definition at line 1 of file files\_6.js.

## 7.92 html/search/files\_7.js File Reference

### Variables

- var **searchData**

## 7.92.1 Variable Documentation

### 7.92.1.1 var searchData

#### Initial value:

```
=
[
  ['hierarchy_2ejs', ['hierarchy.js', ['../hierarchy_8js.html', 1, '']]]
]
```

Definition at line 1 of file files\_7.js.

## 7.93 [html/search/files\\_8.js](#) File Reference

### Variables

- var **searchData**

#### 7.93.1 Variable Documentation

##### 7.93.1.1 var searchData

###### Initial value:

```
=  
[  
  ['inputmanager_2ecpp', ['InputManager.cpp', ['../_input_manager_8cpp.html', 1, '']]],  
  ['inputmanager_2ehpp', ['InputManager.hpp', ['../_input_manager_8hpp.html', 1, '']]]  
]
```

Definition at line 1 of file [files\\_8.js](#).

## 7.94 [html/search/files\\_9.js](#) File Reference

### Variables

- var **searchData**

#### 7.94.1 Variable Documentation

##### 7.94.1.1 var searchData

###### Initial value:

```
=  
[  
  ['jquery_2ejs', ['jquery.js', ['../jquery_8js.html', 1, '']]]  
]
```

Definition at line 1 of file [files\\_9.js](#).

## 7.95 [html/search/files\\_a.js](#) File Reference

### Variables

- var **searchData**

## 7.95.1 Variable Documentation

### 7.95.1.1 var searchData

**Initial value:**

```
=  
[  
  ['logfile_2ecpp', ['Logfile.cpp', ['../_logfile_8cpp.html', 1, '' ]]],  
  ['logfile_2ehpp', ['Logfile.hpp', ['../_logfile_8hpp.html', 1, '' ]]]  
]
```

Definition at line 1 of file files\_a.js.

## 7.96 html/search/files\_b.js File Reference

### Variables

- var **searchData**

## 7.96.1 Variable Documentation

### 7.96.1.1 var searchData

**Initial value:**

```
=  
[  
  ['main_2ecpp', ['main.cpp', ['../main_8cpp.html', 1, '' ]]],  
  ['main_5f8cpp_2ejs', ['main_8cpp.js', ['../main__8cpp_8js.html', 1, '' ]]],  
  ['menubutton_2ecpp', ['MenuButton.cpp', ['../_menu_button_8cpp.html', 1, '' ]]],  
  ['menubutton_2ehpp', ['MenuButton.hpp', ['../_menu_button_8hpp.html', 1, '' ]]],  
  ['menustate_2ecpp', ['MenuState.cpp', ['../_menu_state_8cpp.html', 1, '' ]]],  
  ['menustate_2ehpp', ['MenuState.hpp', ['../_menu_state_8hpp.html', 1, '' ]]]  
]
```

Definition at line 1 of file files\_b.js.

## 7.97 html/search/files\_c.js File Reference

### Variables

- var **searchData**

## 7.97.1 Variable Documentation

### 7.97.1.1 var searchData

**Initial value:**

```
=
[
  ['navtree_2ejs', ['navtree.js', ['../navtree_8js.html', 1, '']]],
  ['navtreedata_2ejs', ['navtreedata.js', ['../navtreedata_8js.html', 1, '']]],
  ['navtreeindex0_2ejs', ['navtreeindex0.js', ['../navtreeindex0_8js.html', 1, '']]],
  ['navtreeindex1_2ejs', ['navtreeindex1.js', ['../navtreeindex1_8js.html', 1, '']]],
  ['navtreeindex2_2ejs', ['navtreeindex2.js', ['../navtreeindex2_8js.html', 1, '']]],
  ['net_2ecpp', ['Net.cpp', ['../_net_8cpp.html', 1, '']]],
  ['net_2ehpp', ['Net.hpp', ['../_net_8hpp.html', 1, '']]]
]
```

Definition at line 1 of file files\_c.js.

## 7.98 html/search/files\_d.js File Reference

### Variables

- var **searchData**

### 7.98.1 Variable Documentation

#### 7.98.1.1 var searchData

**Initial value:**

```
=
[
  ['pages_5f0_2ejs', ['pages_0.js', ['../pages__0_8js.html', 1, '']]],
  ['pausestate_2ecpp', ['PauseState.cpp', ['../_pause_state_8cpp.html', 1, '']]],
  ['pausestate_2ehpp', ['PauseState.hpp', ['../_pause_state_8hpp.html', 1, '']]],
  ['playstate_2ecpp', ['PlayState.cpp', ['../_play_state_8cpp.html', 1, '']]],
  ['playstate_2ehpp', ['PlayState.hpp', ['../_play_state_8hpp.html', 1, '']]]
]
```

Definition at line 1 of file files\_d.js.

## 7.99 html/search/files\_e.js File Reference

### Variables

- var **searchData**

## 7.99.1 Variable Documentation

### 7.99.1.1 var searchData

**Initial value:**

```
=
[
  ['readme_2emd', ['README.md', ['../_r_e_a_d_m_e_8md.html', 1, '' ]]],
  ['resize_2ejs', ['resize.js', ['../resize_8js.html', 1, '' ]]]
]
```

Definition at line 1 of file files\_e.js.

## 7.100 html/search/files\_f.js File Reference

### Variables

- var **searchData**

### 7.100.1 Variable Documentation

#### 7.100.1.1 var searchData

**Initial value:**

```
=
[
  ['search_2ejs', ['search.js', ['../search_8js.html', 1, '' ]]],
  ['searchdata_2ejs', ['searchdata.js', ['../searchdata_8js.html', 1, '' ]]],
  ['settingstate_2ecpp', ['SettingState.cpp', ['../_setting_state_8cpp.html', 1, '' ]]],
  ['settingstate_2ehpp', ['SettingState.hpp', ['../_setting_state_8hpp.html', 1, '' ]]],
  ['soundmanager_2ecpp', ['SoundManager.cpp', ['../_sound_manager_8cpp.html', 1, '' ]]],
  ['soundmanager_2ehpp', ['SoundManager.hpp', ['../_sound_manager_8hpp.html', 1, '' ]]],
  ['struct_5fbutton_2ejs', ['struct_button.js', ['../struct__button_8js.html', 1, '' ]]],
  ['struct_5fgame_5fstate_5fmachine_5f1_5f1_5fpending_5fchange_2ejs', ['
    struct_game_state_machine_1_1_pending_change.js', ['../struct__game__state__machine_1_1_pending__change_8js.html', 1, '' ]]],
  ['struct_5fimage_5fasset_2ejs', ['struct_image_asset.js', ['../struct__image__asset_8js.html', 1, '' ]]],
  ['struct_5ftext_5fasset_2ejs', ['struct_text_asset.js', ['../struct__text__asset_8js.html', 1, '' ]]],
  ['struct_5fviewport_2ejs', ['struct_viewport.js', ['../struct__viewport_8js.html', 1, '' ]]],
  ['systemtime_2ecpp', ['SystemTime.cpp', ['../_system_time_8cpp.html', 1, '' ]]],
  ['systemtime_2ehpp', ['SystemTime.hpp', ['../_system_time_8hpp.html', 1, '' ]]]
]
```

Definition at line 1 of file files\_f.js.

## 7.101 html/search/functions\_0.js File Reference

### Variables

- var **searchData**

### 7.101.1 Variable Documentation

#### 7.101.1.1 var searchData

**Initial value:**

```
=
[
  ['_5fipaddress',['_IpAddress',['../class___ip_address.html#a506aacadc3547fdcf490ae29920b89a0',1,['_IpAddress::_IpAddress()'],['../class___ip_address.html#a779dc52827ee785e41d9e71e1671cb5b',1,['_IpAddress::_IpAddress(Uint16 port)'],['../class___ip_address.html#a1ee372343aaca69c9b54b44252914f48',1,['_IpAddress::_IpAddress(std::string host, Uint16 port)']]]]]
]
```

Definition at line 1 of file functions\_0.js.

## 7.102 html/search/functions\_1.js File Reference

### Variables

- var **searchData**

### 7.102.1 Variable Documentation

#### 7.102.1.1 var searchData

**Initial value:**

```
=
[
  ['accept',['Accept',['../class_host_socket.html#a61be7093448d76cf2dc5789b0391a7fb',1,['HostSocket']]]],
  ['addviewport',['addViewport',['../class_texture_manager.html#a3251c4ad4d5cfbac5ff441262fdd081',1,['_TextureManager::addViewport(int x, int y, int w, int h, std::string keyOfViewport)'],['_../class_texture_manager.html#af236db7da4c953fe9cd484daebd1937a',1,['_TextureManager::addViewport(SDL_Rect &viewport, keyOfViewport)']]]]]
]
```

Definition at line 1 of file functions\_1.js.

## 7.103 html/search/functions\_10.js File Reference

### Variables

- var **searchData**



## 7.103.1 Variable Documentation

### 7.103.1.1 var searchData

#### Initial value:

```
=
[
  ['quit', ['Quit', ['../class_net.html#af2836a9229d553bf106240ba2d3923e0', 1, 'Net::Quit()'], ['
    ../class_game.html#a8272be134d16c277bb014ad6a22fc357', 1, 'Game::quit()']],
  ['quitlogging', ['quitLogging', ['../class_logfile.html#a2e15bad46a719cd239bablee3e20c6e4', 1, 'Logfile']]]
]
```

Definition at line 1 of file functions\_10.js.

## 7.104 html/search/functions\_11.js File Reference

### Variables

- var searchData

## 7.104.1 Variable Documentation

### 7.104.1.1 var searchData

#### Initial value:

```
=
[
  ['readcookie', ['readCookie', ['../resize_8js.html#a578d54a5ebd9224fad0213048e7a49a7', 1, 'resize.js']],
  ['ready', ['Ready', ['../class_tcp_socket.html#a6727e974bf44519c0695a25ffc168498', 1, 'TcpSocket']],
  ['receive', ['Receive', ['../class_client_socket.html#ad66b7a5ad5a99fc144c0034267184344', 1, 'ClientSocket']],
  ],
  ['registerstate', ['registerState', ['../class_game_state_machine.html#a6741c2efa55780bd809a2889172a5717', 1,
    'GameStateMachine']],
  ['removecolor', ['removeColor', ['../class_texture_manager.html#a7e9984dd269434403e25108bc7f9723c', 1, '
    TextureManager']],
  ['removefont', ['removeFont', ['../class_texture_manager.html#a89c9d1109c0b6434623c78844e938aa2', 1, '
    TextureManager']],
  ['removemusic', ['removeMusic', ['../class_sound_manager.html#a55360940bcadf3858c37781cd0e97919', 1, '
    SoundManager']],
  ['removesfx', ['removeSFX', ['../class_sound_manager.html#a787bfb6e53ced35f5d5ff13377f5fcf', 1, '
    SoundManager']],
  ['removetexture', ['removeTexture', ['../class_texture_manager.html#ab845a8cb25c1773d41f293640b0bfc2a', 1, '
    TextureManager']],
  ['removetoinsertlater', ['removeToInsertLater', ['../navtree_8js.html#aa78016020f40c28356aefd325cd4df74', 1, '
    'navtree.js']],
  ['removeviewport', ['removeViewport', ['../class_texture_manager.html#aa437fd6651b21facf9a9ab5a19e5fe54', 1, '
    'TextureManager']],
  ['render', ['render', ['../class_game.html#a15ddd769261d923827a3cdf41499c843', 1, 'Game::render()'], ['
    ../class_game_over_state.html#a8c1dee88ec3505743033ad685b5d07cf', 1, 'GameOverState::render()'], ['
    ../class_game_state.html#acf2fa61a0f647a7563ea61de48bd445c', 1, 'GameState::render()'], ['
    ../class_game_state_machine.html#abfad06d5c6aa2f7d96a18e405f6d56c5', 1, 'GameStateMachine::render()'], ['
    ../class_menu_state.html#ad7afca66ece4a1e7bad77828e4f39f3e', 1, 'MenuState::render()'], ['../class_pause_state.html#a9f4e2
    PauseState::render()'], ['../class_play_state.html#ad0b2654d0d822b853c6d06ee5c4a95c2', 1, 'PlayState::render()'], [
    '../class_setting_state.html#ade23556bc96502c5c32c18d77d9d97bf', 1, 'SettingState::render()'], ['
    ../class_texture.html#a9c17fab430aec359ecbb1da2d30ee729', 1, 'Texture::render()']],
  ['requeststackclear', ['requestStackClear', ['../class_game_state.html#adc2d30de38b7feb912e97c916b817616', 1, '
    'GameState']],
  ['requeststackpop', ['requestStackPop', ['../class_game_state.html#ad569d66f8d0865d27cd440fedd8b1e3f', 1, '
    GameState']],
  ['requeststackpush', ['requestStackPush', ['../class_game_state.html#a9c76fffe7f14ec73a043f494d60c65c0', 1, '
    GameState']],
  ['reset', ['reset', ['../class_input_manager.html#ae91e72df4d98cae96c2dbd7121150249', 1, '
    InputManager::reset()'], ['../class_net_message.html#a4d99c2a021cb3c61db21a37ec74efef7', 1, 'NetMessage::reset()']],
  ['resizeheight', ['resizeHeight', ['../resize_8js.html#a4bd3414bc1780222b192bcf33b645804', 1, 'resize.js']],
  ['resizewidth', ['resizeWidth', ['../resize_8js.html#a99942f5b5c75445364f2437051090367', 1, 'resize.js']],
  ['restorewidth', ['restoreWidth', ['../resize_8js.html#a517273f9259c941fd618dda7a901e6c2', 1, 'resize.js']],
  ['resumemusic', ['resumeMusic', ['../class_sound_manager.html#abd77ddeb149ae99524d536e0f6f47507', 1, '
    SoundManager']]
]
```

Definition at line 1 of file functions\_11.js.

## 7.105 html/search/functions\_12.js File Reference

### Variables

- var **searchData**

### 7.105.1 Variable Documentation

#### 7.105.1.1 var searchData

#### Initial value:

```
=
[
  ['searchbox', ['SearchBox', ['../search_8js.html#a52066106482f8136aa9e0ec859e8188f', 1, 'search.js']],
  ['searchresults', ['SearchResults', ['../search_8js.html#a9189b9f7a32b6bc78240f40348f7fe03', 1, 'search.js']],
  ],
  ['selectandhighlight', ['selectAndHighlight', ['../navtree_8js.html#a0dbf0d5f6126afd88420745f7d3c202d', 1, 'navtree.js']],
  ['send', ['Send', ['../class_client_socket.html#a3625f0f064636097e7512e001ce2f88a', 1, 'ClientSocket']],
  ['setalpha', ['setAlpha', ['../class_texture.html#a80adda33cfff336c88c76a1c1c985b15', 1, 'Texture']],
  ['setalphaoftexture', ['setAlphaOfTexture', ['
    ../class_texture_manager.html#a1351013e3771ad4ae7bd13f9bb828c94', 1, 'TextureManager']],
  ['setblendmode', ['setBlendMode', ['../class_texture.html#a103742a60e353103511ef8f4d2454e54', 1, 'Texture']],
  ],
  ['setblendmodeoftexture', ['setBlendModeOfTexture', ['
    ../class_texture_manager.html#a141dc1cfec39286adba22f215581b9d5', 1, 'TextureManager']],
  ['setclassattr', ['setClassAttr', ['../search_8js.html#a499422fc054a5278ae32801ec0082c56', 1, 'search.js']],
  ['setcolor', ['setColor', ['../class_texture.html#a5cdea158eb4ea4568c9bbb4fa0339963', 1, 'Texture']],
  ['setcoloroftexture', ['setColorOfTexture', ['
    ../class_texture_manager.html#a81b1f761d46f5872bfaf2f34935a1f3', 1, 'TextureManager']],
  ['setip', ['SetIp', ['../class_ip_address.html#a178be5654be576b51cb50179add9867c', 1, '_IpAddress']],
  ['setkeyactions', ['setKeyActions', ['../search_8js.html#a98192fa2929bb8e4b0a890a4909ab9b2', 1, 'search.js']],
  ],
  ['setsocket', ['SetSocket', ['../class_tcp_socket.html#aa778d049bb58a601b8a6863f0499fc3f', 1, '
    TcpSocket::SetSocket()'], ['../class_client_socket.html#aa2f5426d61e40d19db29e4df507529cc', 1, 'ClientSocket::SetSocket()'],
  ],
  ['settingstate', ['SettingState', ['../class_setting_state.html#a8f01be54b7a28818d9856ce868387829', 1, '
    SettingState']],
  ['setxpos', ['setXPos', ['../class_vector2_d.html#ac94f12d39c408cdadff156b23b32e0a2', 1, 'Vector2D']],
  ['setypos', ['setYPos', ['../class_vector2_d.html#a4a512eae5fee42d5b114d7b134656e7b', 1, 'Vector2D']],
  ['shownode', ['showNode', ['../navtree_8js.html#a0238ad48be94f9f5fd305ea40b8f64ab', 1, 'navtree.js']],
  ['showroot', ['showRoot', ['../navtree_8js.html#af98a8e3534da945399ea20870c0f3e92', 1, 'navtree.js']],
  ['showsyncoff', ['showSyncOff', ['../navtree_8js.html#a6522b3f540ead0feb12ccf5fcl1f04c4', 1, 'navtree.js']],
  ['showsyncon', ['showSyncOn', ['../navtree_8js.html#a84095390aca39b6cb693d3fb22d32dd0', 1, 'navtree.js']],
  ['start', ['start', ['../class_timer.html#a3a8b5272198d029779dc9302a54305a8', 1, 'Timer']],
  ['starttimer', ['startTimer', ['../class_system_time.html#a88c644649bb4f4967f1b09ef5f3c6928', 1, 'SystemTime'
    ]]],
  ['stop', ['stop', ['../class_timer.html#a63f0eb44b27402196590a03781515dba', 1, 'Timer']],
  ['storelink', ['storeLink', ['../navtree_8js.html#ade730323aadbb971c053136b7758c9dce', 1, 'navtree.js']],
  ['strippath', ['stripPath', ['../navtree_8js.html#a9336c21407bb7ced644331eb7a2a6e35', 1, 'navtree.js']],
  ['strippath2', ['stripPath2', ['../navtree_8js.html#a70bc36adda6141a703fc7ee2b772ec63', 1, 'navtree.js']],
]
```

Definition at line 1 of file functions\_12.js.

## 7.106 html/search/functions\_13.js File Reference

### Variables

- var **searchData**

## 7.106.1 Variable Documentation

### 7.106.1.1 var searchData

**Initial value:**

```
=
[
  ['tcpsocket', ['TcpSocket', ['../class_tcp_socket.html#a132aa72af141d611f8bad96ba585a79f', 1, 'TcpSocket']]],
  ['textout', ['Textout', ['../class_logfile.html#adf654c28da71b2450fa90f5488f31c6d', 1, 'Logfile']]],
  ['texture', ['Texture', ['../class_texture.html#a6c275e3f186675ff6ed73ccf970e552f', 1, 'Texture']]],
  ['timer', ['Timer', ['../class_timer.html#a5f16e8da27d2a5a5242dead46de05d97', 1, 'Timer']]],
  ['togglefolder', ['toggleFolder', ['../dynsections_8js.html#af244da4527af2d845dca04f5656376cd', 1, 'dynsections.js']]],
  ['toggleinherit', ['toggleInherit', ['../dynsections_8js.html#ac057b640b17ff32af11ced151c9305b4', 1, 'dynsections.js']]],
  ['togglelevel', ['toggleLevel', ['../dynsections_8js.html#a19f577cc1ba571396a85bb1f48bf4df2', 1, 'dynsections.js']]],
  ['togglesynbutton', ['toggleSyncButton', ['../navtree_8js.html#a646cb31d83b39aafec92e0eld123563a', 1, 'navtree.js']]],
  ['togglevisibility', ['toggleVisibility', ['../dynsections_8js.html#a1922c462474df7dfd18741c961d59a25', 1, 'dynsections.js']]]
]
```

Definition at line 1 of file functions\_13.js.

## 7.107 html/search/functions\_14.js File Reference

### Variables

- var **searchData**

## 7.107.1 Variable Documentation

### 7.107.1.1 var searchData

**Initial value:**

```
=
[
  ['unloadbytes', ['UnLoadBytes', ['../class_net_message.html#a36e10edc0ed83e8f26b8755d0179a242', 1, 'NetMessage']]],
  ['unpause', ['unpause', ['../class_timer.html#aa4dd50d7ed48ac73efed2950749d35d6', 1, 'Timer']]],
  ['update', ['update', ['../class_game.html#a79df6376b332d63c9eca0dcee30305c3', 1, 'Game::update()'], ['../class_game_object.html#ae83128d0e0efef691417779605ee037c', 1, 'GameObject::update()'], ['../class_game_over_state.html#a62c26d8c7622675df9512f6c81428b44', 1, 'GameOverState::update()'], ['../class_game_state.html#acb677f14e87d9c320e8090fb1889bc80', 1, 'GameState::update()'], ['../class_game_state_machine.html#a7a3be350727fff550f09cc0499398ece', 1, 'GameStateMachine::update()'], ['../class_input_manager.html#a5f16e8da27d2a5a5242dead46de05d97', 1, 'InputManager::update()'], ['../class_menu_button.html#a86b038172871555da45606e20fa6bad7', 1, 'MenuButton::update()'], ['../class_menu_state.html#afc85836f8606a1ff127019f1dc73c5d1', 1, 'MenuState::update()'], ['../class_pause_state.html#aa911e972a1c6da67aaa62c4be9aa03c9', 1, 'PauseState::update()'], ['../class_play_state.html#ac2b39807fbb6e77fcce0fa4caee106a2', 1, 'PlayState::update()'], ['../class_setting_state.html#alf5a1f4587e55b3187438742d6848796', 1, 'SettingState::update()']]],
  ['updatestripes', ['updateStripes', ['../dynsections_8js.html#a8f7493ad859d4fbf2523917511ee7177', 1, 'dynsections.js']]]
]
```

Definition at line 1 of file functions\_14.js.

## 7.108 `html/search/functions_15.js` File Reference

### Variables

- var **searchData**

#### 7.108.1 Variable Documentation

##### 7.108.1.1 `var searchData`

#### Initial value:

```
=
[
  ['vector2d', ['Vector2D', ['../class_vector2_d.html#a98e9997ebb7a629f4db52397d4e0d653', 1, '
    Vector2D::Vector2D()'], ['../class_vector2_d.html#a166caldf158a260a7cbf3b57ff147a4a', 1, 'Vector2D::Vector2D(float x, float
    ]]]
]
```

Definition at line 1 of file `functions_15.js`.

## 7.109 `html/search/functions_16.js` File Reference

### Variables

- var **searchData**

#### 7.109.1 Variable Documentation

##### 7.109.1.1 `var searchData`

#### Initial value:

```
=
[
  ['writecookie', ['writeCookie', ['../resize_8js.html#ad0822459a7d442b8c5e4db795d0aabb4', 1, 'resize.js']]]
]
```

Definition at line 1 of file `functions_16.js`.

## 7.110 `html/search/functions_17.js` File Reference

### Variables

- var **searchData**

### 7.110.1 Variable Documentation

#### 7.110.1.1 var searchData

**Initial value:**

```
=
[
  ['_7egameobject', ['~GameObject', ['../class_game_object.html#a224d4f6d9dd75c8a6f9d022eaf586fd9', 1, '
    GameObject']],
  ['_7emenubutton', ['~MenuButton', ['../class_menu_button.html#a2cf52c32c95ed42bd06117a30eefc5e0', 1, '
    MenuButton']],
  ['_7etcpsocket', ['~TcpSocket', ['../class_tcp_socket.html#a4c6d246451c51ac4226a9301f6711086', 1, 'TcpSocket'
    ]]],
  ['_7etexture', ['~Texture', ['../class_texture.html#a09c4bcb7462f64c1d20fa69dba3cee8a', 1, 'Texture']],
  ['_7evector2d', ['~Vector2D', ['../class_vector2_d.html#ac0f819527d3966874c4c9bb72ab9f67e', 1, 'Vector2D']]
]
```

Definition at line 1 of file functions\_17.js.

## 7.111 html/search/functions\_2.js File Reference

### Variables

- var **searchData**

### 7.111.1 Variable Documentation

#### 7.111.1.1 var searchData

**Initial value:**

```
=
[
  ['b', ['b', ['../jquery_8js.html#a2fa551895933fae9335a0a6b87282241d', 1, 'jquery.js']]]
]
```

Definition at line 1 of file functions\_2.js.

## 7.112 html/search/functions\_3.js File Reference

### Variables

- var **searchData**

### 7.112.1 Variable Documentation

#### 7.112.1.1 var searchData

**Initial value:**

```
=
[
  ['cachedlink', ['cachedLink', ['../navtree_8js.html#aaa2d293f55e5fe3620af4f9a2836e428', 1, 'navtree.js']]],
  ['calclength', ['calcLength', ['../class_vector2_d.html#acdc3e2ec01ce8f40bfe327277e6f70a2', 1, 'Vector2D']]],
  ['clearstates', ['clearStates', ['../class_game_state_machine.html#a962cf43168c332ffd3bd5887a447d606', 1, '
    GameStateMachine']]],
  ['clientsocket', ['ClientSocket', ['../class_client_socket.html#aa452c26d330984ce23eb98fba8e59c6a', 1, '
    ClientSocket::ClientSocket()'], ['../class_client_socket.html#aedfe0ae831d5ea0ba92117d758e3bb0a', 1, '
    ClientSocket::ClientSocket(std::string host, Uint16 port)']],
  ['connect', ['Connect', ['../class_client_socket.html#a695fe22a96141c79e0c4a9ff9a08d4ab', 1, '
    ClientSocket::Connect(_IpAddress &remoteip)'], ['../class_client_socket.html#af54cfa90c461ad22bec3aee7e10f9687', 1, '
    ClientSocket::Connect(HostSocket &the_listener_socket)']],
  ['converttoid', ['convertToId', ['../search_8js.html#a196a29bd5a5ee7cd5b485e0753a49e57', 1, 'search.js']]],
  ['createindent', ['createIndent', ['../navtree_8js.html#a4d8f406d49520a0cede2e48347a3d7aa', 1, 'navtree.js']]
  ],
  ['createlogfile', ['createLogfile', ['../class_logfile.html#a2c94a1e39ebc041dce5b0e6b170a5f64', 1, 'Logfile'
    ]]],
  ['createresults', ['createResults', ['../search_8js.html#a6b2c651120de3ed1dcf0d85341d51895', 1, 'search.js']]
]
```

Definition at line 1 of file functions\_3.js.

## 7.113 html/search/functions\_4.js File Reference

### Variables

- var **searchData**

### 7.113.1 Variable Documentation

#### 7.113.1.1 var searchData

**Initial value:**

```
=
[
  ['delay', ['delay', ['../class_game.html#a5d0dc9672a7a3e94204912acca84aac0', 1, 'Game']]],
  ['deletelink', ['deleteLink', ['../navtree_8js.html#abdf8e0e69c89803c1b84784a13b7fd2e', 1, 'navtree.js']]],
  ['draw', ['draw', ['../class_game_object.html#a59f11cba9071a39ba2f486a8364ed536', 1, 'GameObject::draw()'], ['
    ../class_menu_button.html#a3e854949b52808f9d6092e149a116f5c', 1, 'MenuButton::draw()']],
  ['drawbox', ['drawBox', ['../class_texture_manager.html#ad4822032f1d798b18b9a8be4c52762f3', 1, '
    TextureManager']]],
  ['drawcircle', ['drawCircle', ['../class_texture_manager.html#a07ab83a11c62921e68e0b61bce8a50d9', 1, '
    TextureManager']]],
  ['drawellipse', ['drawEllipse', ['../class_texture_manager.html#a88f2ec37ce6aea45053283a28d790359', 1, '
    TextureManager']]],
  ['drawtexture', ['drawTexture', ['../class_texture_manager.html#afdcf7e52a63c8edb79fe6169897020aa', 1, '
    TextureManager']]
]
```

Definition at line 1 of file functions\_4.js.

## 7.114 html/search/functions\_5.js File Reference

### Variables

- var **searchData**

#### 7.114.1 Variable Documentation

##### 7.114.1.1 var searchData

#### Initial value:

```
=
[
  ['each', ['each', ['../jquery_8js.html#a871ff39db627c54c710a3e9909b8234c', 1, 'jquery.js']],
  ['endtimer', ['endTimer', ['../class_system_time.html#a0b409b3645116fd98b8e4da6eb317bf6', 1, 'SystemTime']],
  ['expandnode', ['expandNode', ['../navtree_8js.html#a4eb1f166c9d93b198e1621a4c787a412', 1, 'navtree.js']],
  ['extend', ['extend', ['../jquery_8js.html#a5fb206c91c64d1be35fde236706eab86', 1, 'jquery.js']]
]
```

Definition at line 1 of file functions\_5.js.

## 7.115 html/search/functions\_6.js File Reference

### Variables

- var **searchData**

#### 7.115.1 Variable Documentation

##### 7.115.1.1 var searchData

#### Initial value:

```
=
[
  ['finish', ['finish', ['../class_net_message.html#a1a4e43eedd70acb2cfde384be8938213', 1, 'NetMessage']],
  ['free'

```

Definition at line 1 of file functions\_6.js.

## 7.116 html/search/functions\_7.js File Reference

### Variables

- var **searchData**
- **search.js**

## 7.116.1 Variable Documentation

### 7.116.1.1 search.js

Definition at line 32 of file functions\_7.js.

### 7.116.1.2 var searchData

Definition at line 1 of file functions\_7.js.

## 7.117 html/search/functions\_8.js File Reference

### Variables

- var **searchData**

### 7.117.1 Variable Documentation

#### 7.117.1.1 var searchData

**Initial value:**

```
=
[
  ['haltmusic', ['haltMusic', ['../class_sound_manager.html#afc5e7be51b78380ea6822186a4dec3f8', 1, '
    SoundManager']]],
  ['handleevents', ['handleEvents', ['../class_game.html#adb5563f62c0c82e3e42ec36501aa5698', 1, '
    Game::handleEvents()'], ['../class_game_over_state.html#a8ad921acf3f50ac0a32d7eb44ee25d74', 1, 'GameOverState::handleEvent
    '], ['../class_game_state.html#a84df5ae7ee8a0e5197b2228e4006f4ae1', 1, 'GameState::handleEvents()'], ['
    ../class_game_state_machine.html#a88c902835786b8c1cc98902704cf2e0a', 1, 'GameStateMachine::handleEvents()'], ['
    ../class_menu_state.html#a8f28f6bc4955efcca31edb15351432ea', 1, 'MenuState::handleEvents()'], ['
    ../class_pause_state.html#a4a4c63c179c2010d80d042b5121408ff', 1, 'PauseState::handleEvents()'], ['
    ../class_play_state.html#a649b8c294d631ea9709f7261602dbaa2', 1, 'PlayState::handleEvents()'], ['
    ../class_setting_state.html#ae98f0759ee71daed7eb828cf45e2edec', 1, 'SettingState::handleEvents()']]],
  ['hashurl', ['hashUrl', ['../navtree_8js.html#a20695277530a1a04eef8d289177a5e40', 1, 'navtree.js']],
  ['hashvalue', ['hashValue', ['../navtree_8js.html#aaeb20639619e1371c030d36a7109b27b', 1, 'navtree.js']],
  ['hastexture', ['hasTexture', ['../class_texture_manager.html#ab0e81c27dc87fde20e2ec4744996034f', 1, '
    TextureManager']]],
  ['highlightanchor', ['highlightAnchor', ['../navtree_8js.html#a524fa9bfd80c70bf3a84696b2077eadb', 1, '
    navtree.js']],
  ['hostsocket', ['HostSocket', ['../class_host_socket.html#ae4ca42ef572b22df304676c1a0934475', 1, '
    HostSocket::HostSocket(_IpAddress &the_ip_address)'], ['../class_host_socket.html#ae0e3dfc6ac4a96dad8880558ff9b5519'
    , 1, 'HostSocket::HostSocket(Uint16 port)']]]
]
```

Definition at line 1 of file functions\_8.js.

## 7.118 html/search/functions\_9.js File Reference

### Variables

- var **searchData**
- jquery **js**



### 7.118.1 Variable Documentation

#### 7.118.1.1 jquery.js

Definition at line 3 of file functions\_9.js.

#### 7.118.1.2 var searchData

**Initial value:**

```
=  
[  
  ['if', ['if', ['../jquery_8js.html#a9db6d45a025ad692282fe23e69eeba43', 1, 'if(!b.support.opacity):&#160
```

Definition at line 1 of file functions\_9.js.

## 7.119 html/search/functions\_a.js File Reference

### Variables

- var **searchData**

### 7.119.1 Variable Documentation

#### 7.119.1.1 var searchData

**Initial value:**

```
=  
[  
  ['joysticksinitialised', ['joysticksInitialised', [  
    ../class_input_manager.html#affe737848c793f2a6efc5f5949e50d22', 1, 'InputManager']]]  
]
```

Definition at line 1 of file functions\_a.js.

## 7.120 html/search/functions\_b.js File Reference

### Variables

- var **searchData**

## 7.120.1 Variable Documentation

### 7.120.1.1 var searchData

**Initial value:**

```
=
[
  ['load', ['load', ['../class_sound_manager.html#a34e4bc3aaf5970c9a46d12ae56bc5686', 1, 'SoundManager']]],
  ['loadbytes', ['loadBytes', ['../class_net_message.html#a91162f126a7d3f2b629665a234cd4629', 1, 'NetMessage']]],
  ['loadcolor', ['loadColor', ['../class_texture_manager.html#a2ea52673d624a2d4631c6faccd51b9e2', 1, 'TextureManager']]],
  ['loadfont', ['loadFont', ['../class_texture_manager.html#a61a38ba29398b32e7163dd42c2c95e54', 1, 'TextureManager']]],
  ['loadfromfile', ['loadFromFile', ['../class_texture.html#a9e82c3960a089fa1001149e1dd30ce61', 1, 'Texture']]],
  ['loadfromrenderedtext', ['loadFromRenderedText', ['../class_texture.html#a2923e8eeb0309ccd0e797ec028b280ce', 1, 'Texture']]],
  ['loadimagetexture', ['loadImageTexture', ['../class_texture_manager.html#ae35b624ac5ef3d27553e5a4126d37fad', 1, 'TextureManager']]],
  ['loadtexttexture', ['loadTextTexture', ['../class_texture_manager.html#a576b678e6e94d2a69756890cc1841c67', 1, 'TextureManager']]],
  ['localstoragesupported', ['localStorageSupported', ['../navtree_8js.html#ac49af616f532f2364be9f58280469d33', 1, 'navtree.js']]]
]
```

Definition at line 1 of file functions\_b.js.

## 7.121 html/search/functions\_c.js File Reference

### Variables

- var **searchData**

### 7.121.1 Variable Documentation

#### 7.121.1.1 var searchData

**Initial value:**

```
=
[
  ['main', ['main', ['../main_8cpp.html#a0ddf1224851353fc92bfbff6f499fa97', 1, 'main.cpp']]],
  ['menubutton', ['MenuButton', ['../class_menu_button.html#a322b34a062c93f8604b12bfb35b40073', 1, 'MenuButton::MenuButton()'], ['../class_menu_button.html#afb36d4cd08610f92c52568900dc85bba', 1, 'MenuButton::MenuButton(Button values)']]],
  ['menustate', ['MenuState', ['../class_menu_state.html#aa838db54f2d2f52a9e02bb95d813fac5', 1, 'MenuState']]]
]
```

Definition at line 1 of file functions\_c.js.

## 7.122 html/search/functions\_d.js File Reference

### Variables

- var **searchData**

## 7.122.1 Variable Documentation

### 7.122.1.1 var searchData

**Initial value:**

```
=
[
  ['navto', ['navTo', ['../navtree_8js.html#a21beb601032fff375100a907f32129a5', 1, 'navtree.js']],
  ['netmessage', ['NetMessage', ['../class_net_message.html#a3799ba9993d92bface630292aaeda98a', 1, 'NetMessage'
    ]]],
  ['newnode', ['newNode', ['../navtree_8js.html#aa2418b16159e9502e990f97ea6ec26c8', 1, 'navtree.js']],
  ['numtoload', ['NumToLoad', ['../class_net_message.html#aaed785609f5d695da4e8e6b64474ae34', 1, 'NetMessage'
    ]]],
  ['numtounload', ['NumToUnLoad', ['../class_net_message.html#a1b2278803e60e3da862a2c92e0d32c05', 1, '
    NetMessage'
  ]]]
]
```

Definition at line 1 of file functions\_d.js.

## 7.123 html/search/functions\_e.js File Reference

### Variables

- var **searchData**

## 7.123.1 Variable Documentation

### 7.123.1.1 var searchData

**Initial value:**

```
=
[
  ['ok', ['Ok', ['../class___ip_address.html#a3b67d23e404b69e2a06b82bb977226a6', 1, 'IpAddress::Ok()'], ['
    ../class_tcp_socket.html#a15ef8d2fb3a7a1aaac272036d407f9d2', 1, 'TcpSocket::Ok()']],
  ['onenter', ['onEnter', ['../class_game_over_state.html#aa584dc013bffbfb73825347d46accdcf', 1, '
    GameOverState::onEnter()'], ['../class_game_state.html#ae09dc3c714b03c30fcc15c147e409554', 1, 'GameState::onEnter()'], ['
    ../class_menu_state.html#af7c088f1da275c5ff09025bb50f4c4ab', 1, 'MenuState::onEnter()'], ['
    ../class_pause_state.html#a792d7f851080b5dcb0df5bd6b4974fde', 1, 'PauseState::onEnter()'], ['
    ../class_play_state.html#addb7d2bfee8e0b74e7d96bcc4616601b', 1, 'PlayState::onEnter()'], ['../class_setting_state.html#a41
    , 1, 'SettingState::onEnter()']],
  ['onexit', ['onExit', ['../class_game_over_state.html#ac36b6abddf2d30cc52fc912ad69bba5b', 1, '
    GameOverState::onExit()'], ['../class_game_state.html#a6e3e8872466d4eda59c8860c99b8350d', 1, 'GameState::onExit()'], ['
    ../class_menu_state.html#a7ff1d1ca0d3c03592a737673647406ca', 1, 'MenuState::onExit()'], ['
    ../class_pause_state.html#a5a5315c115ba23beb4c03137cca947a3', 1, 'PauseState::onExit()'], ['
    ../class_play_state.html#aed7fef037f6e9c9fc4a02924e2fe7154', 1, 'PlayState::onExit()'], ['../class_setting_state.html#a513
    SettingState::onExit()']],
  ['onready', ['OnReady', ['../class_tcp_socket.html#a6adda9d1772811c201475d3c8ef0d13e', 1, '
    TcpSocket::OnReady()'], ['../class_host_socket.html#a33d0e87a996be6b86e92991525b2b683', 1, 'HostSocket::OnReady()'], ['
    ../class_client_socket.html#ab13fc0ce771ec240e349b37b7ec83de5', 1, 'ClientSocket::OnReady()']]
]
```

Definition at line 1 of file functions\_e.js.

## 7.124 html/search/functions\_f.js File Reference

### Variables

- var **searchData**

### 7.124.1 Variable Documentation

#### 7.124.1.1 var searchData

##### Initial value:

```
=
[
  ['p', ['p', ['../jquery_8js.html#a2335e57f79b6acfb6de59c235dc8a83e', 1, 'jquery.js']]],
  ['pathname', ['pathName', ['../navtree_8js.html#a364b3f4132309fa9aae78585cf2cb772', 1, 'navtree.js']]],
  ['pause', ['pause', ['../class_timer.html#a0289effad7b573c508bc27e405900a23', 1, 'Timer']]],
  ['pausemusic', ['pauseMusic', ['../class_sound_manager.html#a5071bf5e87394afdb1e4148227ffc3ea', 1, '
    SoundManager']]],
  ['pausestate', ['PauseState', ['../class_pause_state.html#abd0bfd55745cd8e10b5cabd626b996b6', 1, 'PauseState'
    ]]],
  ['playmusic', ['playMusic', ['../class_sound_manager.html#a4a11e94b4b8c92f38623f340757cad96', 1, '
    SoundManager']]],
  ['playsound', ['playSound', ['../class_sound_manager.html#a76790b359b2a7c2046dd7a564323d5b8', 1, '
    SoundManager']]],
  ['playstate', ['PlayState', ['../class_play_state.html#abb85065bcff6a5cd3c322e60ac2a7414', 1, 'PlayState']]],
  ['popstate', ['popState', ['../class_game_state_machine.html#a691905effed30b630c3971fb5bbfcc4f', 1, '
    GameStateMachine']]],
  ['pushstate', ['pushState', ['../class_game_state_machine.html#aba2cc81772a19679652869e9090da4ff', 1, '
    GameStateMachine']]]
]
```

Definition at line 1 of file functions\_f.js.

## 7.125 html/search/pages\_0.js File Reference

### Variables

- var **searchData**

### 7.125.1 Variable Documentation

#### 7.125.1.1 var searchData

##### Initial value:

```
=
[
  ['bug_20list', ['Bug List', ['../bug.html', 1, '']]
]
```

Definition at line 1 of file pages\_0.js.

## 7.126 `html/search/pages_1.js` File Reference

### Variables

- var **searchData**

#### 7.126.1 Variable Documentation

##### 7.126.1.1 `var searchData`

#### Initial value:

```
=  
[  
  ['sdl_5fframework', ['sdl_framework', ['../md_README.html', 1, '' ]]]  
]
```

Definition at line 1 of file `pages_1.js`.

## 7.127 `html/search/search.js` File Reference

### Functions

- function **convertTold** (search)
- function **getXPos** (item)
- function **getYPos** (item)
- function **SearchBox** (name, resultsPath, inFrame, label)
- function **SearchResults** (name)
- function **setKeyActions** (elem, action)
- function **setClassAttr** (elem, attr)
- function **createResults** ()
- function **init\_search** ()

#### 7.127.1 Function Documentation

##### 7.127.1.1 `function convertTold ( search )`

Definition at line 1 of file `search.js`.

##### 7.127.1.2 `function createResults ( )`

Definition at line 722 of file `search.js`.

##### 7.127.1.3 `function getXPos ( item )`

Definition at line 24 of file `search.js`.

#### 7.127.1.4 function getYPos ( *item* )

Definition at line 38 of file search.js.

#### 7.127.1.5 function init\_search ( )

Definition at line 777 of file search.js.

#### 7.127.1.6 function SearchBox ( *name*, *resultsPath*, *inFrame*, *label* )

Definition at line 59 of file search.js.

#### 7.127.1.7 function SearchResults ( *name* )

Definition at line 404 of file search.js.

#### 7.127.1.8 function setClassAttr ( *elem*, *attr* )

Definition at line 716 of file search.js.

#### 7.127.1.9 function setKeyActions ( *elem*, *action* )

Definition at line 709 of file search.js.

## 7.128 html/search/searchdata.js File Reference

### Variables

- var **indexSectionsWithContent**
- var **indexSectionNames**
- var **indexSectionLabels**

### 7.128.1 Variable Documentation

#### 7.128.1.1 var indexSectionLabels

##### Initial value:

```
=  
{  
  0: "All",  
  1: "Classes",  
  2: "Files",  
  3: "Functions",  
  4: "Variables",  
  5: "Typedefs",  
  6: "Enumerations",  
  7: "Enumerator",  
  8: "Pages"  
}
```

Definition at line 27 of file searchdata.js.

## 7.128.1.2 var indexSectionNames

**Initial value:**

```
=
{
  0: "all",
  1: "classes",
  2: "files",
  3: "functions",
  4: "variables",
  5: "typedefs",
  6: "enums",
  7: "enumvalues",
  8: "pages"
}
```

Definition at line 14 of file searchdata.js.

## 7.128.1.3 var indexSectionsWithContent

**Initial value:**

```
=
{
  0: "_abcdefghijklmnopqrstuvwxyz~",
  1: "_bcghilmnpstv",
  2: "_acdefghijlmnpstv",
  3: "_abcdefghijklmnopqrstuvwxyz~",
  4: "_abcdfghiklmnpstvxyz",
  5: "c",
  6: "bfmst",
  7: "bcefglmnpstw",
  8: "bs"
}
```

Definition at line 1 of file searchdata.js.

## 7.129 html/search/typedefs\_0.js File Reference

**Variables**

- var **searchData**

## 7.129.1 Variable Documentation

## 7.129.1.1 var searchData

**Initial value:**

```
=
[
  ['charbuf', ['charbuf', ['../_net_8hpp.html#a5ad5cc46aebdcda07f8694c714f9f5db', 1, 'Net.hpp']]]
]
```

Definition at line 1 of file typedefs\_0.js.

## 7.130 html/search/variables\_0.js File Reference

### Variables

- var **searchData**

### 7.130.1 Variable Documentation

#### 7.130.1.1 var searchData

##### Initial value:

```
=
[
  ['_5fcommon_5fenums_5f8hpp',['_common_enums_8hpp',['
    ../__common__enums__8hpp_8js.html#ab43c7e80acbcea88051c04c63e5450e9',1,'_common_enums_8hpp.js']]],
  ['_5finput_5fmanager_5f8hpp',['_input_manager_8hpp',['
    ../__input__manager__8hpp_8js.html#ae08396963c33b1a99191a1dbcb96e39c',1,'_input_manager_8hpp.js']]],
  ['_5fnet_5f8hpp',['_net_8hpp',['../__net__8hpp_8js.html#adabb1dfeba238e35f5ea40ecb31ededd',1,'
    _net_8hpp.js']]],
  ['_5fsound_5fmanager_5f8hpp',['_sound_manager_8hpp',['
    ../__sound__manager__8hpp_8js.html#a3828bfc5a490b9903089f8999a579ee7',1,'_sound_manager_8hpp.js']]],
  ['_5ftexture_5f8hpp',['_texture_8hpp',['../__texture__8hpp_8js.html#a32a7715249477fad5c45a34e5ac5d55a',1,
    '_texture_8hpp.js']]]]
]
```

Definition at line 1 of file variables\_0.js.

## 7.131 html/search/variables\_1.js File Reference

### Variables

- var **searchData**

### 7.131.1 Variable Documentation

#### 7.131.1.1 var searchData

##### Initial value:

```
=
[
  ['a',['a',['../class_game_object.html#a11857f459e212b42ef6b682e2b238e1c',1,'GameObject::a()'],[
    ../struct_button.html#a529efa5ef20c24c0dada504b6abb5c',1,'Button::a()']]],
  ['ad',['ad',['../jquery_8js.html#ad223f5fba68c41c1236671ac5c5b0fcb',1,'jquery.js']]],
  ['alignment',['alignment',['../struct_viewport.html#a61646887ca7ddd5f8e1da8305cf4e5fb',1,'Viewport']]],
  ['am'
```

Definition at line 1 of file variables\_1.js.



## 7.132 html/search/variables\_10.js File Reference

### Variables

- var **searchData**

### 7.132.1 Variable Documentation

#### 7.132.1.1 var searchData

##### Initial value:

```
=
[
  ['text', ['text', ['../struct_text_asset.html#a546e84d953eda5f9adfb6099a0879e9', 1, 'TextAsset::text()'], ['
    ../class_game_state.html#a83f9f1d4e507b10dcc6356aeb8f9288c', 1, 'GameState::text()']],
  ['textassets', ['textAssets', ['../class_game_state.html#a126a46fe65718ecea1b93886d8e10be7', 1, 'GameState']]
],
  ['textquality', ['textQuality', ['../struct_text_asset.html#a62cc225103ecd5f558ab8376d88eeb14', 1, '
    TextAsset::textQuality()'], ['../struct_button.html#a5525a953d6f538ab23952ad39cd996ab', 1, 'Button::textQuality()']],
  ['textureid', ['textureID', ['../struct_image_asset.html#a182dbf40d633a17b162d5b290c795efe', 1, '
    ImageAsset::textureID()'], ['../struct_text_asset.html#a406da13e66fb1f06e8887c5157bff570', 1, 'TextAsset::textureID()'], ['
    ../struct_button.html#add6e5af7b8a64db138c2b6c0d034c8c5', 1, 'Button::textureID()'], ['
    ../struct_viewport.html#a94323941e7cc1126043d4da62d22a7af', 1, 'Viewport::textureID()']],
  ['ttf', ['ttf', ['../class_game_state.html#acab2133a5125c9d922ac9c81d3261fc2', 1, 'GameState']],
  ['ttfkeys', ['ttfKeys', ['../class_game_state.html#ac0c3d56f4ea1825dc6401b8948e97946', 1, 'GameState']]
]
```

Definition at line 1 of file variables\_10.js.

## 7.133 html/search/variables\_11.js File Reference

### Variables

- var **searchData**

### 7.133.1 Variable Documentation

#### 7.133.1.1 var searchData

##### Initial value:

```
=
[
  ['viewport', ['viewport', ['../struct_viewport.html#ab06e9a99d412d982654ec85b78d50d6d', 1, 'Viewport']],
  ['viewportid', ['viewportID', ['../struct_image_asset.html#abab5a0da5c3edacb2b594d0aa8ee5e7b', 1, '
    ImageAsset::viewportID()'], ['../struct_text_asset.html#a1741e05ea7c8933db1dc20f8830b02b7', 1, 'TextAsset::viewportID()'],
    ['../struct_button.html#a95d255c9f1e4d4d6b2e3d6662346c2c9', 1, 'Button::viewportID()'], ['
    ../struct_viewport.html#a91c0439b31ac7371a3b4be8624c73a79', 1, 'Viewport::viewportID()']],
  ['viewports', ['viewports', ['../class_game_state.html#aa04ce670e6d1134cb7b93320f4910ad2', 1, 'GameState']]
]
```

Definition at line 1 of file variables\_11.js.

## 7.134 html/search/variables\_12.js File Reference

### Variables

- var **searchData**

#### 7.134.1 Variable Documentation

##### 7.134.1.1 var searchData

###### Initial value:

```
=  
[  
  ['width', ['width', ['../class_game_object.html#a461647c775e04bffb85977084a196542', 1, 'GameObject']]]  
]
```

Definition at line 1 of file variables\_12.js.

## 7.135 html/search/variables\_13.js File Reference

### Variables

- var **searchData**

#### 7.135.1 Variable Documentation

##### 7.135.1.1 var searchData

###### Initial value:

```
=  
[  
  ['x', ['x', ['../struct_button.html#a2ec3bc40025b64b44319e7464164d61f', 1, 'Button']]],  
  ['x1', ['x1', ['../struct_button.html#aedc881eba82814a7e6c62f3954b37665', 1, 'Button']]],  
  ['x2', ['x2', ['../struct_button.html#af1cfe70765d31617c45a1cd42b1763c0', 1, 'Button']]]  
]
```

Definition at line 1 of file variables\_13.js.

## 7.136 html/search/variables\_14.js File Reference

### Variables

- var **searchData**

### 7.136.1 Variable Documentation

#### 7.136.1.1 var searchData

**Initial value:**

```
=  
[  
  ['y', 'y', ['./struct_button.html#afff35ce0c47f662c3b096e5b644648a5', 1, 'Button']]],  
  ['y1', 'y1', ['./struct_button.html#a8b5ebffd19ed6c1708092d568f684ca3', 1, 'Button']]],  
  ['y2', 'y2', ['./struct_button.html#aaa0cda56851a1ad65816d1f6849d6c6f', 1, 'Button']]]  
]
```

Definition at line 1 of file variables\_14.js.

## 7.137 html/search/variables\_15.js File Reference

### Variables

- var **searchData**

### 7.137.1 Variable Documentation

#### 7.137.1.1 var searchData

**Initial value:**

```
=  
[  
  ['z', 'z', ['./jquery_8.js.html#adc18d83abfd9f87d396e8fd6b6ac0fe1', 1, 'jquery.js']]]  
]
```

Definition at line 1 of file variables\_15.js.

## 7.138 html/search/variables\_2.js File Reference

### Variables

- var **searchData**
- jquery **js**

### 7.138.1 Variable Documentation

#### 7.138.1.1 jquery js

Definition at line 3 of file variables\_2.js.

### 7.138.1.2 var searchData

#### Initial value:

```
=
[
  ['b', ['b', ['../class_game_object.html#a0c2fd0eb1c3abf030014b8b947dffc9', 1, 'GameObject::b()'], ['
    ../struct_button.html#a24ce58cc0078e0839bc25fca5dbfd6f6', 1, 'Button::b()'], ['
    ../jquery_8js.html#aa4026ad5544b958e54ce5e106fa1c805', 1, 'b():&#160
```

Definition at line 1 of file variables\_2.js.

## 7.139 html/search/variables\_3.js File Reference

### Variables

- var **searchData**

### 7.139.1 Variable Documentation

#### 7.139.1.1 var searchData

Definition at line 1 of file variables\_3.js.

## 7.140 html/search/variables\_4.js File Reference

### Variables

- var **searchData**

### 7.140.1 Variable Documentation

#### 7.140.1.1 var searchData

#### Initial value:

```
=
[
  ['destruct', ['destRect', ['../struct_image_asset.html#afc528fe2d4719f58c5edd35eb21d0ff5', 1, '
    ImageAsset::destRect()'], ['../struct_text_asset.html#aab94312b528991772b24aa329650234d', 1, 'TextAsset::destRect()'], ['
    ../struct_button.html#af906201d6bcb6a4a69ef2ec0c586fdd0', 1, 'Button::destRect()']]
]
```

Definition at line 1 of file variables\_4.js.

## 7.141 html/search/variables\_5.js File Reference

### Variables

- var **searchData**

#### 7.141.1 Variable Documentation

##### 7.141.1.1 var searchData

##### Initial value:

```
=
[
  ['filename', ['fileName', ['../struct_image_asset.html#ac391790be83aeb3dbba5272264b8f826', 1, 'ImageAsset']]],
  ['files', ['files', ['../files_8js.html#a0742cac2750bccc2d88ac080fb9daa22', 1, 'files.js']]],
  ['fontid', ['fontID', ['../struct_button.html#a7e0174ba10436b9fc93a08b68b6f32f4', 1, 'Button']]],
  ['fontname', ['fontName', ['../struct_text_asset.html#ac3417bca22e240c8fd4ca8597f3b4aab', 1, 'TextAsset']]],
  ['func', ['func', ['../struct_button.html#a5bafdb55d23564622c9bb3096bdbel140', 1, 'Button']]],
  ['functionmap', ['functionMap', ['../class_game_state.html#ac82cacf93446df8b2245f83c65e4398d', 1, 'GameState']]],
  ['functions_5fdup', ['functions_dup', ['../functions__dup_8js.html#a8eb2e04e78e0cae8380f93a505246352', 1, 'functions_dup.js']]],
  ['functions_5ffunc', ['functions_func', ['../functions__func_8js.html#a653490dc39ab84e827db92787f08a1d9', 1, 'functions_func.js']]]
]
```

Definition at line 1 of file variables\_5.js.

## 7.142 html/search/variables\_6.js File Reference

### Variables

- var **searchData**

#### 7.142.1 Variable Documentation

##### 7.142.1.1 var searchData

##### Initial value:

```
=
[
  ['g', ['g', ['../class_game_object.html#a64e64b77bd42fba5aa1cf52b680b7aff', 1, 'GameObject::g()'], ['../struct_button.html#ab570fc82271a22ba37b80d1a473d6469', 1, 'Button::g()']]],
  ['gameobjects', ['gameObjects', ['../class_game_state.html#a1cdd652d877427e57097eb9b6f1317bf', 1, 'GameState']]]
]
```

Definition at line 1 of file variables\_6.js.

## 7.143 html/search/variables\_7.js File Reference

### Variables

- var **searchData**
- all\_12.js

### 7.143.1 Variable Documentation

#### 7.143.1.1 all\_12.js

Definition at line 6 of file variables\_7.js.

#### 7.143.1.2 var searchData

##### Initial value:

```
=
[
  ['header', ['header', ['../resize_8js.html#af920c2a7d4f4b5a962fe8e11257f871d', 1, 'resize.js']]],
  ['height', ['height', ['../class_game_object.html#ae94d98451fb4345860810660a17b487b', 1, 'GameObject']]],
  ['hierarchy', ['hierarchy', ['../hierarchy_8js.html#ad9447ad30669c42ccb861cbe36a18f6b', 1, 'hierarchy.js']]],
  ['hpp', ['hpp', ['../all__12_8js.html#a9b3a14028c4ac90d2d427bf5496d99b6', 1, 'hpp() :&#160
```

Definition at line 1 of file variables\_7.js.

## 7.144 html/search/variables\_8.js File Reference

### Variables

- var **searchData**

### 7.144.1 Variable Documentation

#### 7.144.1.1 var searchData

##### Initial value:

```
=
[
  ['indexsectionlabels', ['indexSectionLabels', ['../searchdata_8js.html#a529972e449c82dc118cbbd3bcf50c44d', 1, 'searchdata.js']]],
  ['indexsectionnames', ['indexSectionNames', ['../searchdata_8js.html#a77149ceed055c6c6ce40973b5bdc19ad', 1, 'searchdata.js']]],
  ['indexsectionswithcontent', ['indexSectionsWithContent', ['../searchdata_8js.html#a6250af3c9b54dee6efc5f55f40c78126', 1, 'searchdata.js']]]
]
```

Definition at line 1 of file variables\_8.js.

## 7.145 html/search/variables\_9.js File Reference

### Variables

- var **searchData**

#### 7.145.1 Variable Documentation

##### 7.145.1.1 var searchData

##### Initial value:

```
=  
[  
  ['k', ['k', ['../jquery_8js.html#ab26645c014aa005ecedef329ecf58c99', 1, 'jquery.js']]]  
]
```

Definition at line 1 of file variables\_9.js.

## 7.146 html/search/variables\_a.js File Reference

### Variables

- var **searchData**

#### 7.146.1 Variable Documentation

##### 7.146.1.1 var searchData

##### Initial value:

```
=  
[  
  ['l', ['L', ['../jquery_8js.html#a38ee4c0b5f4fe2a18d0c783af540d253', 1, 'jquery.js']]]  
]
```

Definition at line 1 of file variables\_a.js.

## 7.147 html/search/variables\_b.js File Reference

### Variables

- var **searchData**

### 7.147.1 Variable Documentation

#### 7.147.1.1 var searchData

**Initial value:**

```
=
[
  ['m_5fsocket', ['m_Socket', ['../class_tcp_socket.html#a7c08ca662d111a1d8c9419bb2654b2c3', 1, 'TcpSocket' ]]],
  ['main_5f8cpp', ['main_8cpp', ['../main__8cpp_8js.html#abcdaa38400a914ba2ff5d79e6a825708', 1, 'main_8cpp.js' ]
  ]],
  ['musickeys', ['musicKeys', ['../class_game_state.html#a618ad67cba2de0d69a614113dcf4d9ae', 1, 'GameState' ]]]
]
```

Definition at line 1 of file variables\_b.js.

## 7.148 html/search/variables\_c.js File Reference

### Variables

- var **searchData**
- **resize js**

### 7.148.1 Variable Documentation

#### 7.148.1.1 resize js

Definition at line 4 of file variables\_c.js.

#### 7.148.1.2 var searchData

**Initial value:**

```
=
[
  ['name', ['name', ['../class_game_state.html#aecelf40d0d84c629ef4f3bb1d1a952f6', 1, 'GameState' ]]],
  ['navtree', ['navtree', ['../resize_8js.html#a711d37a3374012d4f6060fffe0abea55', 1, 'navtree() :&#160

```

Definition at line 1 of file variables\_c.js.

## 7.149 html/search/variables\_d.js File Reference

### Variables

- var **searchData**



### 7.149.1 Variable Documentation

#### 7.149.1.1 `var searchData`

##### Initial value:

```
=  
[  
  ['percentageX', ['percentageX', ['./struct_viewport.html#a3aae5ea2c692c02dc720113f717194e4', 1, 'Viewport']]  
  ],  
  ['percentageY', ['percentageY', ['./struct_viewport.html#a6f816b42779177d03cc5f966566d77ec', 1, 'Viewport']]  
  ],  
  ['position', ['position', ['./class_game_object.html#a63c71615f7543ca8f39fc32b9478c6c8', 1, 'GameObject']]]  
]
```

Definition at line 1 of file `variables_d.js`.

## 7.150 `html/search/variables_e.js` File Reference

### Variables

- `var searchData`

### 7.150.1 Variable Documentation

#### 7.150.1.1 `var searchData`

##### Initial value:

```
=  
[  
  ['r', ['r', ['./class_game_object.html#adf0f33f5a103f8960b49e37ad390ee7d', 1, 'GameObject::r()'], [  
    './struct_button.html#aaf701ece10a82a5b764f7294b5906dbd', 1, 'Button::r()']]]  
]
```

Definition at line 1 of file `variables_e.js`.

## 7.151 `html/search/variables_f.js` File Reference

### Variables

- `var searchData`
- `all_0 js`

### 7.151.1 Variable Documentation

#### 7.151.1.1 `all_0 js`

Definition at line 5 of file `variables_f.js`.

### 7.151.1.2 var searchData

#### Initial value:

```
=
[
  ['screensize', ['screenSize', ['../class_game_state.html#ad3423b81fc080ffed781f6b1221cf1da', 1, 'GameState']]
],
  ['sdlflip', ['sdlFlip', ['../struct_image_asset.html#aa794dd8bc56cdfae4d4f708728a7fc2e', 1, '
    ImageAsset::sdlFlip()'], ['../struct_text_asset.html#a2de5b7f134ae22d520fd03156b7f01fb', 1, 'TextAsset::sdlFlip()'], ['
    ../struct_button.html#alcbb461a9069ab71001f089acd4ce96c', 1, 'Button::sdlFlip()']]]],
  ['searchdata', ['searchData', ['../all__0_8js.html#ad01a7523f103d6242ef9b0451861231e', 1, 'searchData():&#160
```

Definition at line 1 of file variables\_f.js.

## 7.152 README.md File Reference

### 7.153 source/Game.cpp File Reference

```
#include <valgrind/callgrind.h>
#include "../header/Game.hpp"
#include "../header/GameOverState.hpp"
#include "../header/InputManager.hpp"
#include "../header/Logfile.hpp"
#include "../header/MenuState.hpp"
#include "../header/PauseState.hpp"
#include "../header/PlayState.hpp"
#include "../header/SettingState.hpp"
#include "../header/SoundManager.hpp"
#include "../header/SystemTime.hpp"
#include "../header/TextureManager.hpp"
#include <sstream>
```

### 7.154 source/GameOverState.cpp File Reference

```
#include "../header/Game.hpp"
#include "../header/GameOverState.hpp"
#include "../header/InputManager.hpp"
#include "../header/Logfile.hpp"
#include "../header/MenuState.hpp"
#include "../header/PlayState.hpp"
#include "../header/SoundManager.hpp"
#include "../header/TextureManager.hpp"
```

### 7.155 source/GameState.cpp File Reference

```
#include "../header/Game.hpp"
#include "../header/GameState.hpp"
#include "../header/GameStateMachine.hpp"
#include "../header/InputManager.hpp"
#include "../header/Logfile.hpp"
#include "../header/SoundManager.hpp"
```

## 7.156 source/GameStateMachine.cpp File Reference

```
#include <cassert>
#include "../header/GameStateMachine.hpp"
```

## 7.157 source/InputManager.cpp File Reference

```
#include <sstream>
#include <string>
#include "../header/Game.hpp"
#include "../header/InputManager.hpp"
#include "../header/Logfile.hpp"
```

## 7.158 source/Logfile.cpp File Reference

```
#include <debug/macros.h>
#include "../header/Logfile.hpp"
#include "../header/SystemTime.hpp"
```

## 7.159 source/main.cpp File Reference

```
#include "../header/Game.hpp"
```

### Functions

- int **main** (int argc, char \*argv[])

### 7.159.1 Function Documentation

7.159.1.1 int main ( int *argc*, char \* *argv*[] )

Definition at line 3 of file main.cpp.

## 7.160 source/MenuButton.cpp File Reference

```
#include "../header/InputManager.hpp"
#include "../header/MenuButton.hpp"
#include "../header/TextureManager.hpp"
```

### 7.161 source/MenuState.cpp File Reference

```
#include "../header/Game.hpp"  
#include "../header/InputManager.hpp"  
#include "../header/MenuState.hpp"  
#include "../header/PlayState.hpp"  
#include "../header/SoundManager.hpp"  
#include "../header/TextureManager.hpp"
```

### 7.162 source/Net.cpp File Reference

```
#include "../header/Net.hpp"
```

### 7.163 source/PauseState.cpp File Reference

```
#include "../header/Game.hpp"  
#include "../header/InputManager.hpp"  
#include "../header/MenuState.hpp"  
#include "../header/PauseState.hpp"  
#include "../header/SoundManager.hpp"  
#include "../header/TextureManager.hpp"
```

### 7.164 source/PlayState.cpp File Reference

```
#include "../header/Game.hpp"  
#include "../header/GameOverState.hpp"  
#include "../header/InputManager.hpp"  
#include "../header/MenuState.hpp"  
#include "../header/PauseState.hpp"  
#include "../header/PlayState.hpp"  
#include "../header/TextureManager.hpp"
```

### 7.165 source/SettingState.cpp File Reference

```
#include "../header/SettingState.hpp"
```

### 7.166 source/SoundManager.cpp File Reference

```
#include "../header/Logfile.hpp"  
#include "../header/SoundManager.hpp"
```

## 7.167 source/SystemTime.cpp File Reference

```
#include "../header/SystemTime.hpp"
```

## 7.168 source/Texture.cpp File Reference

```
#include "../header/Game.hpp"  
#include "../header/Logfile.hpp"  
#include "../header/Texture.hpp"
```

## 7.169 source/TextureManager.cpp File Reference

```
#include "../header/Game.hpp"  
#include "../header/Logfile.hpp"  
#include "../header/TextureManager.hpp"
```

## 7.170 source/Timer.cpp File Reference

```
#include "../header/Timer.hpp"
```

## 7.171 source/Vector2D.cpp File Reference

```
#include "../header/Vector2D.hpp"
```



# Index

- \_IpAddress, 13
    - \_IpAddress, 13
    - GetHost, 14
    - GetIpAddress, 14
    - GetPort, 14
    - Ok, 14
    - SetIp, 14
  - ~GameObject
    - GameObject, 23
  - ~MenuButton
    - MenuButton, 43
  - ~TcpSocket
    - TcpSocket, 62
  - ~Texture
    - Texture, 65
  - ~Vector2D
    - Vector2D, 78
- a
  - Button, 15
  - GameObject, 24
- Accept
  - HostSocket, 36
- aD
  - jquery.js, 96
- addViewport
  - TextureManager, 69
- alignment
  - Viewport, 80
- all\_0.js
  - searchData, 107
- all\_1.js
  - searchData, 107
- all\_10.js
  - hpp, 108
  - searchData, 108
- all\_11.js
  - searchData, 108
- all\_12.js
  - searchData, 109
- all\_13.js
  - js, 110
  - searchData, 110
- all\_14.js
  - searchData, 110
- all\_15.js
  - searchData, 111
- all\_16.js
  - searchData, 111
- all\_17.js
  - searchData, 111
- all\_18.js
  - searchData, 112
- all\_19.js
  - searchData, 112
- all\_1a.js
  - searchData, 113
- all\_1b.js
  - searchData, 113
- all\_2.js
  - js, 113
  - searchData, 113
- all\_3.js
  - searchData, 114
- all\_4.js
  - searchData, 114
- all\_5.js
  - searchData, 115
- all\_6.js
  - searchData, 115
- all\_7.js
  - js, 116
  - searchData, 116
- all\_8.js
  - js, 116
  - searchData, 116
- all\_9.js
  - js, 117
  - searchData, 117
- all\_a.js
  - searchData, 117
- all\_b.js
  - searchData, 118
- all\_c.js
  - searchData, 118
- all\_d.js
  - searchData, 119
- all\_e.js
  - js, 119
  - searchData, 119
- all\_f.js
  - searchData, 120
- aM
  - jquery.js, 96
- angle
  - Button, 15
  - GameObject, 24
  - ImageAsset, 37
  - TextAsset, 63

- ap
  - jquery.js, 97
- aQ
  - jquery.js, 97
- assets
  - GameState, 30
- au
  - jquery.js, 97
- aZ
  - jquery.js, 97
- b
  - Button, 15
  - GameObject, 24
  - jquery.js, 96, 97
- BLENDED
  - CommonEnums.hpp, 85
  - Texture.hpp, 92
- bb
  - jquery.js, 105
- bq
  - jquery.js, 105
- bs
  - jquery.js, 105
- buffer
  - NetMessage, 49
- bufstates
  - NetMessage, 48
- Button, 14
  - a, 15
  - angle, 15
  - b, 15
  - center, 15
  - colorID, 15
  - destRect, 16
  - fontID, 16
  - func, 16
  - g, 16
  - r, 16
  - sdlFlip, 16
  - srcRect, 16
  - textQuality, 16
  - textureID, 16
  - viewportID, 16
  - x, 17
  - x1, 17
  - x2, 17
  - y, 17
  - y1, 17
  - y2, 17
- buttonKeys
  - GameState, 30
- c
  - jquery.js, 106
- calcLength
  - Vector2D, 79
- center
  - Button, 15
  - ImageAsset, 37
  - TextAsset, 63
- charbuf
  - Net.hpp, 89
- classes\_0.js
  - searchData, 120
- classes\_1.js
  - searchData, 121
- classes\_2.js
  - searchData, 121
- classes\_3.js
  - searchData, 122
- classes\_4.js
  - searchData, 122
- classes\_5.js
  - searchData, 123
- classes\_6.js
  - searchData, 123
- classes\_7.js
  - searchData, 123
- classes\_8.js
  - searchData, 124
- classes\_9.js
  - searchData, 124
- classes\_a.js
  - searchData, 125
- classes\_b.js
  - searchData, 125
- classes\_c.js
  - searchData, 126
- Clear
  - CommonEnums.hpp, 84
- clearStates
  - GameStateMachine, 33
- ClientSocket, 17
  - ClientSocket, 18
  - Connect, 18
  - getIpAddress, 18
  - OnReady, 18
  - Receive, 19
  - Send, 19
  - SetSocket, 19
- color
  - GameState, 31
- colorID
  - Button, 15
  - TextAsset, 64
- colorKeys
  - GameState, 31
- CommonEnums.hpp
  - BLENDED, 85
  - Clear, 84
  - FLIP\_HORIZONTAL, 84
  - FLIP\_VERTICAL, 84
  - FLIP, 84
  - GameOver, 84
  - Menu, 84
  - NONE, 84



- None, 84
- Pause, 84
- Play, 84
- Pop, 84
- Push, 84
- SHADED, 85
- SOLID, 85
- Setting, 84
- StateAction, 84
- States, 84
- TEXTQUALITY, 84
- Connect
  - ClientSocket, 18
- convertTold
  - search.js, 155
- createLogfile
  - Logfile, 41
- createResults
  - search.js, 155
- css
  - jquery.js, 106
- curCSS
  - jquery.js, 106
- delay
  - Game, 20
- destRect
  - Button, 16
  - ImageAsset, 37
  - TextAsset, 64
- draw
  - GameObject, 23
  - MenuButton, 43
- drawBox
  - TextureManager, 70
- drawCircle
  - TextureManager, 70
- drawEllipse
  - TextureManager, 70
- drawTexture
  - TextureManager, 71
- dynsections.js
  - toggleFolder, 94
  - toggleInherit, 94
  - toggleLevel, 94
  - toggleVisibility, 94
  - updateStripes, 94
- EMPTY
  - NetMessage, 48
- each
  - jquery.js, 96
- endTimer
  - SystemTime, 60
- enums\_0.js
  - searchData, 126
- enums\_1.js
  - searchData, 126
- enums\_2.js
  - searchData, 127
- enums\_3.js
  - searchData, 127
- enums\_4.js
  - hpp, 128
  - searchData, 128
- enumvalues\_0.js
  - hpp, 128
  - searchData, 128
- enumvalues\_1.js
  - searchData, 129
- enumvalues\_2.js
  - searchData, 129
- enumvalues\_3.js
  - searchData, 129
- enumvalues\_4.js
  - searchData, 130
- enumvalues\_5.js
  - searchData, 130
- enumvalues\_6.js
  - searchData, 131
- enumvalues\_7.js
  - hpp, 131
  - searchData, 131
- enumvalues\_8.js
  - searchData, 132
- enumvalues\_9.js
  - searchData, 132
- enumvalues\_a.js
  - hpp, 132
  - searchData, 132
- enumvalues\_b.js
  - searchData, 133
- extend
  - jquery.js, 96
- FLIP\_HORIZONTAL
  - CommonEnums.hpp, 84
- FLIP\_VERTICAL
  - CommonEnums.hpp, 84
- FLIP
  - CommonEnums.hpp, 84
- FULL
  - NetMessage, 48
- fileName
  - ImageAsset, 37
- files\_0.js
  - searchData, 133
- files\_1.js
  - searchData, 134
- files\_10.js
  - searchData, 134
- files\_11.js
  - searchData, 135
- files\_2.js
  - searchData, 135
- files\_3.js
  - searchData, 136
- files\_4.js

- searchData, 136
- files\_5.js
  - searchData, 137
- files\_6.js
  - searchData, 137
- files\_7.js
  - searchData, 137
- files\_8.js
  - searchData, 138
- files\_9.js
  - searchData, 138
- files\_a.js
  - searchData, 139
- files\_b.js
  - searchData, 139
- files\_c.js
  - searchData, 140
- files\_d.js
  - searchData, 140
- files\_e.js
  - searchData, 141
- files\_f.js
  - searchData, 141
- finish
  - NetMessage, 48
- fontID
  - Button, 16
- fontName
  - TextAsset, 64
- free
  - Texture, 66
- freeMemory
  - Game, 20
  - SoundManager, 56
  - TextureManager, 71
- func
  - Button, 16
- functionMap
  - GameState, 31
- functions\_0.js
  - searchData, 142
- functions\_1.js
  - searchData, 142
- functions\_10.js
  - searchData, 143
- functions\_11.js
  - searchData, 143
- functions\_12.js
  - searchData, 144
- functions\_13.js
  - searchData, 145
- functions\_14.js
  - searchData, 145
- functions\_15.js
  - searchData, 146
- functions\_16.js
  - searchData, 146
- functions\_17.js
  - searchData, 147
- functions\_2.js
  - searchData, 147
- functions\_3.js
  - searchData, 148
- functions\_4.js
  - searchData, 148
- functions\_5.js
  - searchData, 149
- functions\_6.js
  - searchData, 149
- functions\_7.js
  - js, 150
  - searchData, 150
- functions\_8.js
  - searchData, 150
- functions\_9.js
  - js, 151
  - searchData, 151
- functions\_a.js
  - searchData, 151
- functions\_b.js
  - searchData, 152
- functions\_c.js
  - searchData, 152
- functions\_d.js
  - searchData, 153
- functions\_e.js
  - searchData, 153
- functions\_f.js
  - searchData, 154
- g
  - Button, 16
  - GameObject, 24
  - GFXAsset, 35
  - Game, 19
    - delay, 20
    - freeMemory, 20
    - getRenderer, 20
    - getWindow, 20
    - handleEvents, 20
    - init, 21
    - Instance, 21
    - isRunning, 21
    - quit, 21
    - render, 21
    - update, 21
  - GameObject, 22
    - ~GameObject, 23
  - a, 24
  - angle, 24
  - b, 24
  - draw, 23
  - g, 24
  - GameObject, 23
  - getHeight, 23
  - getPosition, 23
  - getWidth, 23

- height, 24
- position, 24
- r, 24
- update, 24
- width, 25
- gameObjects
  - GameState, 31
- GameOver
  - CommonEnums.hpp, 84
- GameOverState, 25
  - GameOverState, 25
  - handleEvents, 26
  - onEnter, 26
  - onExit, 26
  - render, 26
  - update, 27
- GameState, 27
  - assets, 30
  - buttonKeys, 30
  - color, 31
  - colorKeys, 31
  - functionMap, 31
  - gameObjects, 31
  - GameState, 28
  - handleEvents, 29
  - musicKeys, 31
  - name, 31
  - onEnter, 29
  - onExit, 29
  - render, 30
  - requestStackClear, 30
  - requestStackPop, 30
  - requestStackPush, 30
  - screenSize, 31
  - soundKeys, 31
  - stateJson, 32
  - text, 32
  - textAssets, 32
  - ttf, 32
  - ttfKeys, 32
  - update, 30
  - viewports, 32
- GameStateMachine, 33
  - clearStates, 33
  - GameStateMachine, 33
  - handleEvents, 33
  - isEmpty, 34
  - popState, 34
  - pushState, 34
  - registerState, 34
  - render, 34
  - update, 34
- getASCTime
  - SystemTime, 60
- getAxisX
  - InputManager, 38
- getAxisY
  - InputManager, 38
- getButtonState
  - InputManager, 39
- getDate
  - SystemTime, 60
- getDateTime
  - SystemTime, 60
- getHeight
  - GameObject, 23
  - Texture, 66
- getHeightOfTexture
  - TextureManager, 71
- GetHost
  - \_IpAddress, 14
- GetIpAddress
  - \_IpAddress, 14
- getIpAddress
  - ClientSocket, 18
- getMouseButtonState
  - InputManager, 39
- getMousePosition
  - InputManager, 39
- GetPort
  - \_IpAddress, 14
- getPosition
  - GameObject, 23
- getRenderer
  - Game, 20
- getTicks
  - Timer, 76
- getTime
  - SystemTime, 60
- getTimerValue
  - SystemTime, 60
- getViewport
  - TextureManager, 72
- getWidth
  - GameObject, 23
  - Texture, 66
- getWidthOfTexture
  - TextureManager, 72
- getWindow
  - Game, 20
- getXPos
  - search.js, 155
  - Vector2D, 79
- getYPos
  - search.js, 155
  - Vector2D, 79
- haltMusic
  - SoundManager, 56
- handleEvents
  - Game, 20
  - GameOverState, 26
  - GameState, 29
  - GameStateMachine, 33
  - MenuState, 45
  - PauseState, 50
  - PlayState, 52

- SettingState, 54
- hasTexture
  - TextureManager, 72
- header/Asset.hpp, 83
- header/CommonEnums.hpp, 83
- header/Game.hpp, 85
- header/GameObject.hpp, 85
- header/GameOverState.hpp, 86
- header/GameState.hpp, 86
- header/GameStateMachine.hpp, 87
- header/InputManager.hpp, 87
- header/Logfile.hpp, 88
- header/MenuButton.hpp, 88
- header/MenuState.hpp, 89
- header/Net.hpp, 89
- header/PauseState.hpp, 90
- header/PlayState.hpp, 90
- header/SettingState.hpp, 90
- header/SoundManager.hpp, 91
- header/SystemTime.hpp, 91
- header/Texture.hpp, 92
- header/TextureManager.hpp, 92
- header/Timer.hpp, 93
- header/Vector2D.hpp, 93
- header/Viewport.hpp, 93
- height
  - GameObject, 24
- HostSocket, 35
  - Accept, 36
  - HostSocket, 36
  - OnReady, 36
- hpp
  - all\_10.js, 108
  - enums\_4.js, 128
  - enumvalues\_0.js, 128
  - enumvalues\_7.js, 131
  - enumvalues\_a.js, 132
- html/dynsections.js, 94
- html/jquery.js, 95
- html/search/all\_0.js, 106
- html/search/all\_1.js, 107
- html/search/all\_10.js, 107
- html/search/all\_11.js, 108
- html/search/all\_12.js, 108
- html/search/all\_13.js, 109
- html/search/all\_14.js, 110
- html/search/all\_15.js, 110
- html/search/all\_16.js, 111
- html/search/all\_17.js, 111
- html/search/all\_18.js, 112
- html/search/all\_19.js, 112
- html/search/all\_1a.js, 112
- html/search/all\_1b.js, 113
- html/search/all\_2.js, 113
- html/search/all\_3.js, 114
- html/search/all\_4.js, 114
- html/search/all\_5.js, 115
- html/search/all\_6.js, 115
- html/search/all\_7.js, 116
- html/search/all\_8.js, 116
- html/search/all\_9.js, 117
- html/search/all\_a.js, 117
- html/search/all\_b.js, 118
- html/search/all\_c.js, 118
- html/search/all\_d.js, 119
- html/search/all\_e.js, 119
- html/search/all\_f.js, 120
- html/search/classes\_0.js, 120
- html/search/classes\_1.js, 121
- html/search/classes\_2.js, 121
- html/search/classes\_3.js, 121
- html/search/classes\_4.js, 122
- html/search/classes\_5.js, 122
- html/search/classes\_6.js, 123
- html/search/classes\_7.js, 123
- html/search/classes\_8.js, 124
- html/search/classes\_9.js, 124
- html/search/classes\_a.js, 124
- html/search/classes\_b.js, 125
- html/search/classes\_c.js, 125
- html/search/enums\_0.js, 126
- html/search/enums\_1.js, 126
- html/search/enums\_2.js, 127
- html/search/enums\_3.js, 127
- html/search/enums\_4.js, 127
- html/search/enumvalues\_0.js, 128
- html/search/enumvalues\_1.js, 128
- html/search/enumvalues\_2.js, 129
- html/search/enumvalues\_3.js, 129
- html/search/enumvalues\_4.js, 130
- html/search/enumvalues\_5.js, 130
- html/search/enumvalues\_6.js, 130
- html/search/enumvalues\_7.js, 131
- html/search/enumvalues\_8.js, 131
- html/search/enumvalues\_9.js, 132
- html/search/enumvalues\_a.js, 132
- html/search/enumvalues\_b.js, 133
- html/search/files\_0.js, 133
- html/search/files\_1.js, 134
- html/search/files\_10.js, 134
- html/search/files\_11.js, 134
- html/search/files\_2.js, 135
- html/search/files\_3.js, 135
- html/search/files\_4.js, 136
- html/search/files\_5.js, 136
- html/search/files\_6.js, 137
- html/search/files\_7.js, 137
- html/search/files\_8.js, 138
- html/search/files\_9.js, 138
- html/search/files\_a.js, 138
- html/search/files\_b.js, 139
- html/search/files\_c.js, 139
- html/search/files\_d.js, 140
- html/search/files\_e.js, 140
- html/search/files\_f.js, 141
- html/search/functions\_0.js, 141

- html/search/functions\_1.js, 142
- html/search/functions\_10.js, 142
- html/search/functions\_11.js, 143
- html/search/functions\_12.js, 144
- html/search/functions\_13.js, 144
- html/search/functions\_14.js, 145
- html/search/functions\_15.js, 146
- html/search/functions\_16.js, 146
- html/search/functions\_17.js, 146
- html/search/functions\_2.js, 147
- html/search/functions\_3.js, 147
- html/search/functions\_4.js, 148
- html/search/functions\_5.js, 149
- html/search/functions\_6.js, 149
- html/search/functions\_7.js, 149
- html/search/functions\_8.js, 150
- html/search/functions\_9.js, 150
- html/search/functions\_a.js, 151
- html/search/functions\_b.js, 151
- html/search/functions\_c.js, 152
- html/search/functions\_d.js, 152
- html/search/functions\_e.js, 153
- html/search/functions\_f.js, 154
- html/search/pages\_0.js, 154
- html/search/pages\_1.js, 155
- html/search/search.js, 155
- html/search/searchdata.js, 156
- html/search/typedefs\_0.js, 157
- html/search/variables\_0.js, 158
- html/search/variables\_1.js, 158
- html/search/variables\_10.js, 159
- html/search/variables\_11.js, 159
- html/search/variables\_12.js, 160
- html/search/variables\_13.js, 160
- html/search/variables\_14.js, 160
- html/search/variables\_15.js, 161
- html/search/variables\_2.js, 161
- html/search/variables\_3.js, 162
- html/search/variables\_4.js, 162
- html/search/variables\_5.js, 163
- html/search/variables\_6.js, 163
- html/search/variables\_7.js, 164
- html/search/variables\_8.js, 164
- html/search/variables\_9.js, 165
- html/search/variables\_a.js, 165
- html/search/variables\_b.js, 165
- html/search/variables\_c.js, 166
- html/search/variables\_d.js, 166
- html/search/variables\_e.js, 167
- html/search/variables\_f.js, 167
- if
  - jquery.js, 96
- ImageAsset, 36
  - angle, 37
  - center, 37
  - destRect, 37
  - fileName, 37
  - sdlFlip, 37
  - srcRect, 37
  - textureID, 37
  - viewportID, 37
- indexSectionLabels
  - searchdata.js, 156
- indexSectionNames
  - searchdata.js, 156
- indexSectionsWithContent
  - searchdata.js, 157
- Init
  - Net, 46
- init
  - Game, 21
  - SoundManager, 56
- init\_search
  - search.js, 156
- initTextureManager
  - TextureManager, 72
- initializeJoysticks
  - InputManager, 39
- InputManager, 38
  - getAxisX, 38
  - getAxisY, 38
  - getButtonState, 39
  - getMouseButtonState, 39
  - getMousePosition, 39
  - initializeJoysticks, 39
  - Instance, 39
  - isKeyPressed, 39
  - isKeyReleased, 39
  - isKeyTriggered, 40
  - joysticksInitialised, 40
  - reset, 40
  - update, 40
- InputManager.hpp
  - LEFT, 88
  - MIDDLE, 88
  - mouse\_buttons, 88
  - RIGHT, 88
- Instance
  - Game, 21
  - InputManager, 39
  - Logfile, 41
  - SoundManager, 56
  - SystemTime, 61
  - TextureManager, 72
- isEmpty
  - GameStateMachine, 34
- isKeyPressed
  - InputManager, 39
- isKeyReleased
  - InputManager, 39
- isKeyTriggered
  - InputManager, 40
- isMusicPaused
  - SoundManager, 57
- isMusicPlaying
  - SoundManager, 57

- isPaused
  - Timer, 76
- isRunning
  - Game, 21
- isStarted
  - Timer, 77
- joysticksInitialised
  - InputManager, 40
- jquery.js
  - aD, 96
  - aM, 96
  - ap, 97
  - aQ, 97
  - au, 97
  - aZ, 97
  - b, 96, 97
  - bb, 105
  - bq, 105
  - bs, 105
  - c, 106
  - css, 106
  - curCSS, 106
  - each, 96
  - extend, 96
  - if, 96
  - k, 106
  - L, 106
  - p, 96
  - Z, 106
- js
  - all\_13.js, 110
  - all\_2.js, 113
  - all\_7.js, 116
  - all\_8.js, 116
  - all\_9.js, 117
  - all\_e.js, 119
  - functions\_7.js, 150
  - functions\_9.js, 151
  - variables\_2.js, 161
  - variables\_7.js, 164
  - variables\_c.js, 166
  - variables\_f.js, 167
- k
  - jquery.js, 106
- L
  - jquery.js, 106
- LEFT
  - InputManager.hpp, 88
- load
  - SoundManager, 57
- LoadBytes
  - NetMessage, 48
- loadColor
  - TextureManager, 73
- loadFont
  - TextureManager, 73
- loadFromFile
  - Texture, 66
- loadFromRenderedText
  - Texture, 66
- loadImageTexture
  - TextureManager, 73
- loadTextTexture
  - TextureManager, 73
- Logfile, 40
  - createLogfile, 41
  - Instance, 41
  - quitLogging, 41
  - Textout, 42
- m\_Socket
  - TcpSocket, 63
- MIDDLE
  - InputManager.hpp, 88
- main
  - main.cpp, 169
- main.cpp
  - main, 169
- Menu
  - CommonEnums.hpp, 84
- MenuButton, 42
  - ~MenuButton, 43
  - draw, 43
  - MenuButton, 43
  - update, 43
- MenuState, 44
  - handleEvents, 45
  - MenuState, 44
  - onEnter, 45
  - onExit, 45
  - render, 45
  - update, 46
- mouse\_buttons
  - InputManager.hpp, 88
- musicKeys
  - GameState, 31
- NONE
  - CommonEnums.hpp, 84
- name
  - GameState, 31
- Net, 46
  - Init, 46
  - Quit, 46
- Net.hpp
  - charbuf, 89
- NetMessage, 47
  - buffer, 49
  - bufstates, 48
  - EMPTY, 48
  - FULL, 48
  - finish, 48
  - LoadBytes, 48
  - NetMessage, 48
  - NumToLoad, 48

- NumToUnLoad, 48
- READING, 48
- reset, 48
- state, 49
- UnLoadBytes, 48
- WRITING, 48
- None
  - CommonEnums.hpp, 84
- NumToLoad
  - NetMessage, 48
- NumToUnLoad
  - NetMessage, 48
- Ok
  - \_IpAddress, 14
  - TcpSocket, 62
- onEnter
  - GameOverState, 26
  - GameState, 29
  - MenuState, 45
  - PauseState, 50
  - PlayState, 52
  - SettingState, 54
- onExit
  - GameOverState, 26
  - GameState, 29
  - MenuState, 45
  - PauseState, 50
  - PlayState, 52
  - SettingState, 54
- OnReady
  - ClientSocket, 18
  - HostSocket, 36
  - TcpSocket, 62
- p
  - jquery.js, 96
- pages\_0.js
  - searchData, 154
- pages\_1.js
  - searchData, 155
- Pause
  - CommonEnums.hpp, 84
- pause
  - Timer, 77
- pauseMusic
  - SoundManager, 57
- PauseState, 49
  - handleEvents, 50
  - onEnter, 50
  - onExit, 50
  - PauseState, 49
  - render, 50
  - update, 51
- percentageX
  - Viewport, 80
- percentageY
  - Viewport, 81
- Play
  - CommonEnums.hpp, 84
  - playMusic
    - SoundManager, 58
  - playSound
    - SoundManager, 58
  - PlayState, 51
    - handleEvents, 52
    - onEnter, 52
    - onExit, 52
    - PlayState, 51
    - render, 52
    - update, 53
  - Pop
    - CommonEnums.hpp, 84
  - popState
    - GameStateMachine, 34
  - position
    - GameObject, 24
  - Push
    - CommonEnums.hpp, 84
  - pushState
    - GameStateMachine, 34
- Quit
  - Net, 46
- quit
  - Game, 21
- quitLogging
  - Logfile, 41
- r
  - Button, 16
  - GameObject, 24
- READING
  - NetMessage, 48
- README.md, 168
- RIGHT
  - InputManager.hpp, 88
- Ready
  - TcpSocket, 62
- Receive
  - ClientSocket, 19
- registerState
  - GameStateMachine, 34
- removeColor
  - TextureManager, 74
- removeFont
  - TextureManager, 74
- removeMusic
  - SoundManager, 58
- removeSFX
  - SoundManager, 58
- removeTexture
  - TextureManager, 74
- removeViewport
  - TextureManager, 74
- render
  - Game, 21
  - GameOverState, 26

- GameState, 30
- GameStateMachine, 34
- MenuState, 45
- PauseState, 50
- PlayState, 52
- SettingState, 54
- Texture, 66
- requestStackClear
  - GameState, 30
- requestStackPop
  - GameState, 30
- requestStackPush
  - GameState, 30
- reset
  - InputManager, 40
  - NetMessage, 48
- resumeMusic
  - SoundManager, 58
- SHADED
  - CommonEnums.hpp, 85
  - Texture.hpp, 92
- SOLID
  - CommonEnums.hpp, 85
  - Texture.hpp, 92
- SOUND\_MUSIC
  - SoundManager.hpp, 91
- SOUND\_SFX
  - SoundManager.hpp, 91
- screenSize
  - GameState, 31
- sdlFlip
  - Button, 16
  - ImageAsset, 37
  - TextAsset, 64
- search.js
  - convertTold, 155
  - createResults, 155
  - getXPos, 155
  - getYPos, 155
  - init\_search, 156
  - SearchBox, 156
  - SearchResults, 156
  - setClassAttr, 156
  - setKeyActions, 156
- SearchBox
  - search.js, 156
- searchData
  - all\_0.js, 107
  - all\_1.js, 107
  - all\_10.js, 108
  - all\_11.js, 108
  - all\_12.js, 109
  - all\_13.js, 110
  - all\_14.js, 110
  - all\_15.js, 111
  - all\_16.js, 111
  - all\_17.js, 111
  - all\_18.js, 112
  - all\_19.js, 112
  - all\_1a.js, 113
  - all\_1b.js, 113
  - all\_2.js, 113
  - all\_3.js, 114
  - all\_4.js, 114
  - all\_5.js, 115
  - all\_6.js, 115
  - all\_7.js, 116
  - all\_8.js, 116
  - all\_9.js, 117
  - all\_a.js, 117
  - all\_b.js, 118
  - all\_c.js, 118
  - all\_d.js, 119
  - all\_e.js, 119
  - all\_f.js, 120
  - classes\_0.js, 120
  - classes\_1.js, 121
  - classes\_2.js, 121
  - classes\_3.js, 122
  - classes\_4.js, 122
  - classes\_5.js, 123
  - classes\_6.js, 123
  - classes\_7.js, 123
  - classes\_8.js, 124
  - classes\_9.js, 124
  - classes\_a.js, 125
  - classes\_b.js, 125
  - classes\_c.js, 126
  - enums\_0.js, 126
  - enums\_1.js, 126
  - enums\_2.js, 127
  - enums\_3.js, 127
  - enums\_4.js, 128
  - enumvalues\_0.js, 128
  - enumvalues\_1.js, 129
  - enumvalues\_2.js, 129
  - enumvalues\_3.js, 129
  - enumvalues\_4.js, 130
  - enumvalues\_5.js, 130
  - enumvalues\_6.js, 131
  - enumvalues\_7.js, 131
  - enumvalues\_8.js, 132
  - enumvalues\_9.js, 132
  - enumvalues\_a.js, 132
  - enumvalues\_b.js, 133
  - files\_0.js, 133
  - files\_1.js, 134
  - files\_10.js, 134
  - files\_11.js, 135
  - files\_2.js, 135
  - files\_3.js, 136
  - files\_4.js, 136
  - files\_5.js, 137
  - files\_6.js, 137
  - files\_7.js, 137
  - files\_8.js, 138



- files\_9.js, 138
- files\_a.js, 139
- files\_b.js, 139
- files\_c.js, 140
- files\_d.js, 140
- files\_e.js, 141
- files\_f.js, 141
- functions\_0.js, 142
- functions\_1.js, 142
- functions\_10.js, 143
- functions\_11.js, 143
- functions\_12.js, 144
- functions\_13.js, 145
- functions\_14.js, 145
- functions\_15.js, 146
- functions\_16.js, 146
- functions\_17.js, 147
- functions\_2.js, 147
- functions\_3.js, 148
- functions\_4.js, 148
- functions\_5.js, 149
- functions\_6.js, 149
- functions\_7.js, 150
- functions\_8.js, 150
- functions\_9.js, 151
- functions\_a.js, 151
- functions\_b.js, 152
- functions\_c.js, 152
- functions\_d.js, 153
- functions\_e.js, 153
- functions\_f.js, 154
- pages\_0.js, 154
- pages\_1.js, 155
- typedefs\_0.js, 157
- variables\_0.js, 158
- variables\_1.js, 158
- variables\_10.js, 159
- variables\_11.js, 159
- variables\_12.js, 160
- variables\_13.js, 160
- variables\_14.js, 161
- variables\_15.js, 161
- variables\_2.js, 161
- variables\_3.js, 162
- variables\_4.js, 162
- variables\_5.js, 163
- variables\_6.js, 163
- variables\_7.js, 164
- variables\_8.js, 164
- variables\_9.js, 165
- variables\_a.js, 165
- variables\_b.js, 166
- variables\_c.js, 166
- variables\_d.js, 167
- variables\_e.js, 167
- variables\_f.js, 167
- SearchResults
  - search.js, 156
- searchdata.js
  - indexSectionLabels, 156
  - indexSectionNames, 156
  - indexSectionsWithContent, 157
- Send
  - ClientSocket, 19
- set
  - TcpSocket, 63
- setAlpha
  - Texture, 67
- setAlphaOfTexture
  - TextureManager, 75
- setBlendMode
  - Texture, 67
- setBlendModeOfTexture
  - TextureManager, 75
- setClassAttr
  - search.js, 156
- setColor
  - Texture, 67
- setColorOfTexture
  - TextureManager, 75
- SetIp
  - \_IpAddress, 14
- setKeyActions
  - search.js, 156
- SetSocket
  - ClientSocket, 19
  - TcpSocket, 62
- setXPos
  - Vector2D, 79
- setYPos
  - Vector2D, 79
- Setting
  - CommonEnums.hpp, 84
- SettingState, 53
  - handleEvents, 54
  - onEnter, 54
  - onExit, 54
  - render, 54
  - SettingState, 53
  - update, 55
- soundKeys
  - GameState, 31
- SoundManager, 55
  - freeMemory, 56
  - haltMusic, 56
  - init, 56
  - Instance, 56
  - isMusicPaused, 57
  - isMusicPlaying, 57
  - load, 57
  - pauseMusic, 57
  - playMusic, 58
  - playSound, 58
  - removeMusic, 58
  - removeSFX, 58
  - resumeMusic, 58

- SoundManager.hpp
  - SOUND\_MUSIC, 91
  - SOUND\_SFX, 91
  - SoundType, 91
- SoundType
  - SoundManager.hpp, 91
- source/Game.cpp, 168
- source/GameOverState.cpp, 168
- source/GameState.cpp, 168
- source/GameStateMachine.cpp, 169
- source/InputManager.cpp, 169
- source/Logfile.cpp, 169
- source/MenuButton.cpp, 169
- source/MenuState.cpp, 170
- source/Net.cpp, 170
- source/PauseState.cpp, 170
- source/PlayState.cpp, 170
- source/SettingState.cpp, 170
- source/SoundManager.cpp, 170
- source/SystemTime.cpp, 171
- source/Texture.cpp, 171
- source/TextureManager.cpp, 171
- source/Timer.cpp, 171
- source/Vector2D.cpp, 171
- source/main.cpp, 169
- srcRect
  - Button, 16
  - ImageAsset, 37
  - TextAsset, 64
- start
  - Timer, 77
- startTimer
  - SystemTime, 61
- state
  - NetMessage, 49
- StateAction
  - CommonEnums.hpp, 84
- stateJson
  - GameState, 32
- States
  - CommonEnums.hpp, 84
- stop
  - Timer, 77
- SystemTime, 59
  - endTimer, 60
  - getASCTime, 60
  - getDate, 60
  - getDateTime, 60
  - getTime, 60
  - getTimerValue, 60
  - Instance, 61
  - startTimer, 61
- TEXTQUALITY
  - CommonEnums.hpp, 84
- TcpSocket, 61
  - ~TcpSocket, 62
  - m\_Socket, 63
  - Ok, 62
  - OnReady, 62
  - Ready, 62
  - set, 63
  - SetSocket, 62
  - TcpSocket, 62
- text
  - GameState, 32
  - TextAsset, 64
- TextAsset, 63
  - angle, 63
  - center, 63
  - colorID, 64
  - destRect, 64
  - fontName, 64
  - sdlFlip, 64
  - srcRect, 64
  - text, 64
  - textQuality, 64
  - textureID, 64
  - viewportID, 64
- textAssets
  - GameState, 32
- TextQuality
  - Texture.hpp, 92
- textQuality
  - Button, 16
  - TextAsset, 64
- Textout
  - Logfile, 42
- Texture, 65
  - ~Texture, 65
  - free, 66
  - getHeight, 66
  - getWidth, 66
  - loadFromFile, 66
  - loadFromRenderedText, 66
  - render, 66
  - setAlpha, 67
  - setBlendMode, 67
  - setColor, 67
  - Texture, 65
- Texture.hpp
  - BLENDED, 92
  - SHADED, 92
  - SOLID, 92
  - TextQuality, 92
- textureID
  - Button, 16
  - ImageAsset, 37
  - TextAsset, 64
  - Viewport, 81
- TextureManager, 68
  - addViewport, 69
  - drawBox, 70
  - drawCircle, 70
  - drawEllipse, 70
  - drawTexture, 71
  - freeMemory, 71

- getHeightOfTexture, 71
- getViewport, 72
- getWidthOfTexture, 72
- hasTexture, 72
- initTextureManager, 72
- Instance, 72
- loadColor, 73
- loadFont, 73
- loadImageTexture, 73
- loadTextTexture, 73
- removeColor, 74
- removeFont, 74
- removeTexture, 74
- removeViewport, 74
- setAlphaOfTexture, 75
- setBlendModeOfTexture, 75
- setColorOfTexture, 75
- Timer, 75
  - getTicks, 76
  - isPaused, 76
  - isStarted, 77
  - pause, 77
  - start, 77
  - stop, 77
  - Timer, 76
  - unpause, 77
- toggleFolder
  - dynsections.js, 94
- toggleInherit
  - dynsections.js, 94
- toggleLevel
  - dynsections.js, 94
- toggleVisibility
  - dynsections.js, 94
- ttf
  - GameState, 32
- ttfKeys
  - GameState, 32
- typedefs\_0.js
  - searchData, 157
- UnLoadBytes
  - NetMessage, 48
- unpause
  - Timer, 77
- update
  - Game, 21
  - GameObject, 24
  - GameOverState, 27
  - GameState, 30
  - GameStateMachine, 34
  - InputManager, 40
  - MenuButton, 43
  - MenuState, 46
  - PauseState, 51
  - PlayState, 53
  - SettingState, 55
- updateStripes
  - dynsections.js, 94
- variables\_0.js
  - searchData, 158
- variables\_1.js
  - searchData, 158
- variables\_10.js
  - searchData, 159
- variables\_11.js
  - searchData, 159
- variables\_12.js
  - searchData, 160
- variables\_13.js
  - searchData, 160
- variables\_14.js
  - searchData, 161
- variables\_15.js
  - searchData, 161
- variables\_2.js
  - js, 161
  - searchData, 161
- variables\_3.js
  - searchData, 162
- variables\_4.js
  - searchData, 162
- variables\_5.js
  - searchData, 163
- variables\_6.js
  - searchData, 163
- variables\_7.js
  - js, 164
  - searchData, 164
- variables\_8.js
  - searchData, 164
- variables\_9.js
  - searchData, 165
- variables\_a.js
  - searchData, 165
- variables\_b.js
  - searchData, 166
- variables\_c.js
  - js, 166
  - searchData, 166
- variables\_d.js
  - searchData, 167
- variables\_e.js
  - searchData, 167
- variables\_f.js
  - js, 167
  - searchData, 167
- Vector2D, 78
  - ~Vector2D, 78
  - calcLength, 79
  - getXPos, 79
  - getYPos, 79
  - setXPos, 79
  - setYPos, 79
  - Vector2D, 78
- Viewport, 80
  - alignment, 80

- percentageX, 80
  - percentageY, 81
  - textureID, 81
  - viewport, 81
  - viewportID, 81
- viewport
  - Viewport, 81
- viewportID
  - Button, 16
  - ImageAsset, 37
  - TextAsset, 64
  - Viewport, 81
- viewports
  - GameState, 32
- WRITING
  - NetMessage, 48
- width
  - GameObject, 25
- x
  - Button, 17
- x1
  - Button, 17
- x2
  - Button, 17
- y
  - Button, 17
- y1
  - Button, 17
- y2
  - Button, 17
- Z
  - jquery.js, 106