Object Description

NGU0193 - 12SOFA (Mr. Toet)

OBJECT FOCUS (Classes, Enums, Structs, etc.)

Category	Name	Туре	Description
Gameplay	GameManager	Class	Handles the current gameplay session, state (i.e. paused, playing, etc.), and manages gameplay elements
Gameplay	GameState	Enum	Represents a game state { Menus, Paused, Playing, Failed, Complete)
Gameplay	Note	Represents a single drum note in the game, Class containing timing information and type (either D Ka)	
Gameplay	NoteManager	Class	Manages note spawning and hit detection
Gameplay	HitJudgement	Enum	Represents a result (judgement) from a hit { Good, Okay, Miss }
Gameplay	GameSettings	Class	Stores global settings such as input type, miss and judgement behaviour, photosensitivity, and other user preferences
Gameplay	Player	Class	Contains current player's score, combo and other gameplay statistics, also containing logic for calculating accuracy
Gameplay	Score	Struct	Holds score-related statistics including total score, Good, Okay and Miss counts
Input	InputManager	Class	Handles player input from both keyboard and gamepad and allows for key rebinding
Input	InputMethod	Enum	Represents an input method { Keyboard, Gamepad }
Input	KeyBinding	Class	Stores mapping from actions to keys and buttons (such as LeftRim to D on a keyboard)
UI	UIManager	Class	Handles all UI outside of the gameplay, including the Main, Options, Credits and Chart Selection menus

UI	OptionsMenuUI	Class	Handles all UI inside the Options menu, mapping all input fields to their respective properties, also handles tab navigation within Options menu
UI	OptionsMenuTab	Enum	Represents a tab/category in the Options menu {Video, Audio, Input, Gameplay, Customization }
UI	GameUIManager	Class	Handles all gameplay-related UI, including the combo counter, score counter, accuracy and progress bar
UI	ProgressBar	Class	Acts as a component with an adjustable "fill value"
UI	VisualEffectsManag er	Class	Handles all visual effects during gameplay, triggered by gameplay events
UI	VisualEffect	Class	Represents and defines a visual effect and its enabled status
Charts	Chart	Class	Represents a playable song chart with metadata and note data
Charts	ChartLibrary	Class	Stores all imported charts, providing searching and sorting features
Charts	ChartSelectionUI	Class	Displays Chart libraries, metadata and previews for selected charts
Charts	ChartSortCriteria	Enum	Represents criteria used to sort charts in the selection menu { Title, Artist, Difficulty, Length, DateAdded }
Charts	ChartFile	Class	Represents an imported chart file
Charts	ChartFileOsu	Class	Inherits ChartFile, represents an imported chart file following the osu! file format and structure
Charts	ChartFileTJA	Class	Inherits ChartFile, represents an imported chart file following the TJA format common to Taiko simulators
Charts	ChartImporter	Class	Handles parsing and importing of chart files
Leaderboard	Leaderboard	Class	Stores a list of player score entries for local leaderboard tracking
Leaderboard	LeaderboardEntry	Struct	Represents a single leaderboard record containing player name, score, combo, accuracy, rank and date

Leaderboard	LeaderboardUI	Class	Displays leaderboards
Utility	Logger	Class	Outputs system messages and errors to the user
System	Palette	Class	Manages colour schemes for UI components
Audio	AudioType	Enum	Represents an audio channel { Master, Music, SFX}
Audio	AudioManager	Class	Manages the playing, enabling/disabling, and volume of audio effects

INTERFACE AND OBJECTS

Interface	Name	Туре	Description		
Main Menu OBJECT					
Main Menu	Initialize()	Method	Called by the UIManager upon load, resetting all states, deselecting all buttons and randomising splash text		
Main Menu	SplashText	UI Element (TextMeshProU GUI)	Reference to splash text, which is shuffled to display a random message upon load		
Main Menu INTERFACE					
Main Menu	UI_PlayButton.On Click	Event	When the button is clicked, the currently active screen will be changed to the Chart Selection menu		
Main Menu	UI_OptionsButton .OnClick	Event	When the button is clicked, the Options panel will be displayed on the side of the screen		
Main Menu	UI_CreditsButton. OnClick	Event	When the button is clicked, the currently active screen will be changed to the Credits menu		
Main Menu	UI_QuitButton.On Click	Event	When the button is clicked, the application is closed via Application.Quit()		

Options Menu OBJECT				
Options Menu	Initialize()	Method	Called by the UIManager upon load, resetting all states, deselecting all buttons and randomising splash text. Loads current GameSettings instance and applies them to all controls to show current values for each editable option	
Options Menu	currentTab	Enum (OptionsMenuTa b)	The currently selected tab in the Options menu	
Options Menu	Open()	Method	Plays the opening animation for the menu	
Options Menu	Close()	Method	Plays the closing animation for the menu	
Options Menu INTERFACE				
Options Menu	UI_VideoTab.OnCl ick	Event	When the button is clicked, the Video tab will be changed to the active tab	
Options Menu	UI_AudioTab.OnC lick	Event	When the button is clicked, the Audio tab will be changed to the active tab	
Options Menu	UI_InputTab.OnCli ck	Event	When the button is clicked, the Input tab will be changed to the active tab	
Options Menu	UI_Customization Tab.OnClick	Event	When the button is clicked, the Customization tab will be changed to the active tab	
Options Menu	UI_BackButton.O nClick	Event	When the button is clicked, the currently active screen will be changed to the Main menu	
Credits Menu OBJECT				
Credits Menu	Initialize()	Method	Called by the UIManager upon load, resetting all states and deselecting all buttons	
Credits Menu	Open()	Method	Plays the opening animation for the menu	
Credits Menu	Close()	Method	Plays the closing animation for the menu	

Credits Menu	contentText	UI Element (TextMeshProU GUI)	Reference to credits text
Credits Menu INTERFACE			
Credits Menu	UI_BackButton.O nClick	Event	When the button is clicked, the currently active screen will be changed to the Main menu
Chart Selection Menu	OBJECT		
Chart Selection Menu	Initialize()	Method	Called upon loading the screen. Populates the song list from available chart data and resets all selection states
Chart Selection Menu	selectedChart	Object(Chart)	Stores the currently chosen chart
Chart Selection Menu	previewAudioSour ce	AudioSource	Plays a short preview of the selected song
Chart Selection Menu	contentText	UI Element (TextMeshProU GUI)	Reference to credits text
Chart Selection Menu	sortCriteria	Enum (ChartSortCriteri a)	Currently selected sort criteria
Chart Selection Menu	sortAscending	Boolean	Whether or not to sort in ascending order
Chart Selection Menu	searchQuery	String	The search query to filter charts by

Chart Selection Menu	chartLibrary	Object (ChartLibrary)	Reference to the chart library which is being displayed	
Chart Selection	n Menu	!		
INTERFACE				
Chart Selection Menu	UI_BackButton.O nClick	Event	When the button is clicked, the currently active screen will be changed to the Main menu	
Chart Selection Menu	UI_StartButton.O nClick	Event	When the button is clicked, the gameplay screen will begin to load with the selected chart	
Chart Selection Menu	UI_ChartLibraryIte m.OnClick	Event	Sets the clicked chart as the currently selected item and updates the preview display	
Chart Selection Menu	UI_SortDropdown .OnValueChange	Event	Sorts the chart library based on the new criteria (Title, Artist, Difficulty, etc.)	
Chart Selection Menu	UI_SearchBarText .OnValueChange	Event	Filters the chart library based on the search criteria	
Pause Menu OBJECT				
Pause Menu	Open()	Method	Opens the pause menu overlay and freezes gameplay	
Pause Menu	Close()	Method	Closes the pause menu and resumes gameplay	
Pause Menu	isPaused	Boolean	Tracks whether the game is currently paused, used to prevent input during pause state	

Pause Menu INTERFACE			
Pause Menu	UI_ResumeButton .OnClick	Event	When the button is clicked, gameplay is resumed by closing the Pause Menu and unfreezing the game state
Pause Menu	UI_RestartButton. OnClick	Event	When the button is clicked, the current gameplay session is restarted with the same chart
Pause Menu	UI_MenuButton.O nClick	Event	When the button is clicked, the player will be brought to the Main Menu. Current session will be discarded
Pause Menu	UI_ExitButton.On Click	Event	When the button is clicked, the application is closed via Application.Quit()