## Scene

- # GameEngine \* m\_game
- # EntityManager m\_entityManager
- # ActionMap m\_actionMap
- # size\_t m\_currentFrame
- # bool m\_paused
- + void setPaused(bool)
- + Scene()
- + Scene(GameEngine \*gameEngine)
- + virtual void update()=0
- + virtual void sDoAction (const Action &action)=0
- + virtual void sRender()=0
- + virtual void doAction (const Action &action)
- + void registerAction (int inputKey, const std::string &actionName)
- + size\_t currentFrame () const
- + const ActionMap & getAction Map() const
- # virtual void onEnd()=0

## Scene\_Play

- # sf::Music \* m\_background Music
- # sf::Text m\_scoreText
- # size t m score
- # sf::View m\_view
- # size\_t m\_currentBackground
- # size\_t m\_pastBackground
- # size\_t m\_currentFrame
- # size\_t m\_highestScore
- # int m\_alpha

Scene\_Menu

# std::string m title

# sf::Text m\_titleText

# std::vector< sf::Text

# std::vector< std::string

> m\_menuStrings

# sf::Text m menuText

# int m\_selectedMenuIndex

# size\_t m\_backgroundIndex

\*gameEngine=nullptr)

Scene Menu(GameEngine

> m\_texts

+ void sRender()

# void update()

# void onEnd()

# void sDoAction(const

Action &action)

# void init()

- # bool m\_drawTextures
- # bool m\_drawCollision
- # bool m move
- # bool m\_transition
- # bool m\_end
- # Vec2 m gridSize
- # Vec2 m\_targetViewPosition
- # size\_t m\_platformSpacing
- # std::shared\_ptr< Entity > m\_player
- + Scene\_Play(GameEngine \*gameEngine)
- + void init()
- + void update()
- + void onEnd()
- + void replay()
- + void sRemoveDeadPlatforms()
- + void sPlatformGeneration()
- + void sAnimation()
- + void sMovement()
- + void sCollision()
- + void sRender()
- + void sDoAction(const Action &a)
- + void spawnPlayer()
- + void loadLevel()

## Scene\_Settings

- # sf::Text m\_titleText
- # std::vector< sf::Text
  > m\_texts
- # std::vector< std::string > m\_menuStrings
- # sf::Text m\_menuText
- # int m\_selectedMenuIndex
- # sf::RectangleShape m\_volumeSlider
- # sf::Text m\_volumeText
- # sf::Text m\_musicToggleText
- # sf::Text m\_controlSchemeText
- # float m\_volume
- # bool m\_musicOn
- # bool m\_useWASD
- + Scene\_Settings(GameEngine \*gameEngine=nullptr)
- + void sRender()
- # void init()
- # void update()
- # void onEnd()
- # void sDoAction(const Action &action)
- # sf::Color getVolumeColor (float volume)
- # void updateVolumeSlider()

## Scene\_Shop

- # sf::View backgroundView
- # sf::View textView
- # sf::Texture backgroundTexture
- # sf::Texture idleTexture
- # sf::Texture venom
- # sf::Sprite background
- # sf::RectangleShape playerIdle
- # std::vector< sf::Vector2f
  > selectPosition
- # std::vector< sf::Text
  > texts
- # int selectPositionIndex
- # sf::RectangleShape select
- # bool skinPurchased
- # bool isEquipped
- # sf::Clock clock
- + Scene\_Shop(GameEngine \*gameEngine=nullptr)
- + void sRender()
- # void init()
- # void update()
- # void onEnd()
- # void sDoAction(const Action &action)
- # sf::Text textConfig (const std::string &string ForText, sf::Vector2f position, int size, sf::Font &font)
- # sf::Color getDynamicColor (float time)