## Scene

- # GameEngine \* m game
- # EntityManager m\_entityManager
- # ActionMap m\_actionMap
- # size\_t m\_currentFrame
- # bool m\_paused
- # bool m\_hasEnded
- + 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 width() const
- + size\_t height() const
- + size\_t currentFrame () const
- + bool hasEnded() const
- + const ActionMap & getAction Map() const
- # virtual void onEnd()=0

## Scene\_Play

- # 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

# std::vector< std::string

# sf::Text m\_menuText

# int m\_selectedMenuIndex

+ Scene\_Menu(GameEngine

\*gameEngine=nullptr)

> m\_levelPaths

# size\_t m\_index

+ void sRender()

# void update()

# void onEnd()

# void sDoAction(const

Action &action)

# void init()

> m\_texts

- # 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
- # std::vector< std::string
  > m\_levelPaths
- # 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::Text m\_titleText
- # std::vector< sf::Text > m\_texts
- # std::vector< std::string
  > m\_menuStrings
- # std::vector< std::string > m\_levelPaths
- # sf::Text m\_menuText
- # int m\_selectedMenuIndex
- + Scene\_Shop(GameEngine \*gameEngine=nullptr)
- + void sRender()
- # void init()
- # void update()
- # void onEnd()
- # void sDoAction(const Action &action)