My Project

Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

Chapter 2

Class Index

2.1 Class List

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

Chapter 3

Class Documentation

3.1 AppleDisplayable Class Reference

Inheritance diagram for AppleDisplayable:

3.2 AppleEntity Class Reference

Inheritance diagram for AppleEntity:

Collaboration diagram for AppleEntity:

Public Member Functions

- AppleEntity ()

    Construct a new Apple Entity object.
- ∼AppleEntity ()

    Destroy the Apple Entity object.
- const shared::games::components::ComponentsMap & getComponents (void) const noexcept override

    Get the Components object.

3.2.1 Member Function Documentation

3.2.1.1 getComponents()

```
const shared::games::components::ComponentsMap & AppleEntity::getComponents (
            void ) const [override], [noexcept]
```

Get the Components object.

Returns

    const shared::games::components::ComponentsMap&

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

- entities/apple/AppleEntity.hpp
- entities/apple/AppleEntity.cpp

3.3 BackgroundDisplayable Class Reference

Inheritance diagram for BackgroundDisplayable:

Collaboration diagram for BackgroundDisplayable:

Public Member Functions

- BackgroundDisplayable (const shared::games::entity::IEntity &entity)

  Construct a new Background Displayable object.
- ∼BackgroundDisplayable ()

  Destroy the Background Displayable object.
- const shared::games::components::ComponentType getType () const noexcept override

  Get the Type object.
- const shared::games::entity::IEntity & getEntity () noexcept override

  Get the entity object.
- Vector2u & getSize (void) noexcept override

  Get the Size object.
- unsigned int & getZIndex (void) noexcept override

  Get the ZIndex object.
- shared::games::components::TextureProps & getTextureProps (void) noexcept override

  Get the TextureProps object.
- void onMousePress (std::shared_ptr< shared::games::IGame > &ctx) override

  Handle the mouse press event.
- void onMouseHover (std::shared_ptr< shared::games::IGame > &ctx) override

  Handle the mouse hover event.
- void onMouseRelease (std::shared_ptr< shared::games::IGame > &ctx) override

  Handle the mouse release event.
- Vector2i & getPosition (void) noexcept override

  Get the Position object.

Public Attributes

- Vector2i **_position**

3.3.1 Constructor & Destructor Documentation

3.3.1.1 BackgroundDisplayable()

```
BackgroundDisplayable::BackgroundDisplayable (
            const shared::games::entity::IEntity & entity )  [explicit]
```

Construct a new Background Displayable object.

Parameters

entity	

3.3.2   Member Function Documentation

3.3.2.1   getEntity()

```
const shared::games::entity::IEntity & BackgroundDisplayable::getEntity ( )  [override], [noexcept]
```

Get the entity object.

Returns

const shared::games::entity::IEntity&

3.3.2.2   getPosition()

```
Vector2i & BackgroundDisplayable::getPosition (
            void  )  [override], [noexcept]
```

Get the Position object.

Returns

Vector2i&

3.3.2.3   getSize()

```
Vector2u & BackgroundDisplayable::getSize (
            void  )  [override], [noexcept]
```

Get the Size object.

Returns

const Vector2u&

3.3.2.4 getTextureProps()

```
shared::games::components::TextureProps & BackgroundDisplayable::getTextureProps (
            void ) [override], [noexcept]
```

Get the TextureProps object.

Returns

shared::games::components::TextureProps&

3.3.2.5 getType()

```
const shared::games::components::ComponentType BackgroundDisplayable::getType ( ) const [override],
[noexcept]
```

Get the Type object.

Returns

const shared::games::components::ComponentType

3.3.2.6 getZIndex()

```
unsigned int & BackgroundDisplayable::getZIndex (
            void ) [override], [noexcept]
```

Get the ZIndex object.

Returns

unsigned int&

3.3.2.7 onMouseHover()

```
void BackgroundDisplayable::onMouseHover (
            std::shared_ptr< shared::games::IGame > & ctx ) [override]
```

Handle the mouse hover event.

Parameters

ctx	

3.3.2.8 onMousePress()

```
void BackgroundDisplayable::onMousePress (
            std::shared_ptr< shared::games::IGame > & ctx )  [override]
```

Handle the mouse press event.

Parameters

ctx	

3.3.2.9 onMouseRelease()

```
void BackgroundDisplayable::onMouseRelease (
            std::shared_ptr< shared::games::IGame > & ctx )  [override]
```

Handle the mouse release event.

Parameters

ctx	

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

- entities/background/components/BackgroundDisplayable.hpp
- entities/background/components/BackgroundDisplayable.cpp

3.4 BackgroundEntity Class Reference

Inheritance diagram for BackgroundEntity:

Collaboration diagram for BackgroundEntity:

Public Member Functions

- BackgroundEntity ()

    Construct a new Background Entity object.
- ∼BackgroundEntity ()

    Destroy a new Background Entity object.
- const shared::games::components::ComponentsMap & getComponents (void) const noexcept override

    Get the Components object.

3.4.1 Member Function Documentation

3.4.1.1 getComponents()

```
const shared::games::components::ComponentsMap & BackgroundEntity::getComponents (
            void  ) const  [override], [noexcept]
```

Get the Components object.

Returns

    const components::ComponentsMap&

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

- entities/background/BackgroundEntity.hpp
- entities/background/BackgroundEntity.cpp

3.5 ScoreTextDisplayable Class Reference

Inheritance diagram for ScoreTextDisplayable:

Collaboration diagram for ScoreTextDisplayable:

Public Member Functions

- ScoreTextDisplayable (const std::string &content, const shared::games::entity::IEntity &entity)
    Construct a new Score Text Displayable object.
- ∼ScoreTextDisplayable ()
    Destroy the Score Text Displayable object.
- shared::games::components::ITextComponent::TextProps getTextProps () noexcept override
    Get the Text Props object.
- Vector2u & getSize () noexcept override
    Get the Size object.
- unsigned int & getZIndex () noexcept override
    Get the ZIndex object.
- void onMousePress (std::shared_ptr< shared::games::IGame > &ctx) override
    Get the Text object.
- void onMouseRelease (std::shared_ptr< shared::games::IGame > &ctx) override
    Get the Text object.
- void onMouseHover (std::shared_ptr< shared::games::IGame > &ctx) override
    Get the Text object.
- Vector2i & getPosition (void) noexcept override
    Get the Position object.
- const shared::games::components::ComponentType getType () const noexcept override
    Get the Type object.
- const shared::games::entity::IEntity & getEntity () noexcept override
    Get the entity object.

3.5.1 Constructor & Destructor Documentation

3.5.1.1 ScoreTextDisplayable()

```
ScoreTextDisplayable::ScoreTextDisplayable (
            const std::string & content,
            const shared::games::entity::IEntity & entity ) [explicit]
```

Construct a new Score Text Displayable object.

Parameters

content	
entity	

3.5.2 Member Function Documentation

3.5.2.1 getEntity()

```
const shared::games::entity::IEntity & ScoreTextDisplayable::getEntity ( ) [override], [noexcept]
```

Get the entity object.

Returns

> const shared::games::entity::IEntity&

3.5.2.2 getPosition()

```
shared::types::Vector2i & ScoreTextDisplayable::getPosition (
            void ) [override], [noexcept]
```

Get the Position object.

Returns

> const Vector2i&

3.5.2.3 getSize()

```
shared::types::Vector2u & ScoreTextDisplayable::getSize (
            void  ) [override], [noexcept]
```

Get the Size object.

Returns

 const Vector2u&

3.5.2.4 getTextProps()

```
shared::games::components::ITextComponent::TextProps ScoreTextDisplayable::getTextProps ( )
[override], [noexcept]
```

Get the Text Props object.

Returns

 shared::games::components::ITextComponent::TextProps

3.5.2.5 getType()

```
const shared::games::components::ComponentType ScoreTextDisplayable::getType ( ) const  [override],
[noexcept]
```

Get the Type object.

Returns

 const shared::games::components::ComponentType

3.5.2.6 getZIndex()

```
unsigned int & ScoreTextDisplayable::getZIndex (
            void  ) [override], [noexcept]
```

Get the ZIndex object.

Returns

 unsigned int&

3.5.2.7 onMouseHover()

```
void ScoreTextDisplayable::onMouseHover (
            std::shared_ptr< shared::games::IGame > & ctx )  [override]
```

Get the Text object.

Returns

const std::string&

3.5.2.8 onMousePress()

```
void ScoreTextDisplayable::onMousePress (
            std::shared_ptr< shared::games::IGame > & ctx )  [override]
```

Get the Text object.

Returns

const std::string&

3.5.2.9 onMouseRelease()

```
void ScoreTextDisplayable::onMouseRelease (
            std::shared_ptr< shared::games::IGame > & ctx )  [override]
```

Get the Text object.

Returns

const std::string&

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

- entities/texts/score/components/ScoreTextDisplayable.hpp
- entities/texts/score/components/ScoreTextDisplayable.cpp

3.6 ScoreTextEntity Class Reference

Inheritance diagram for ScoreTextEntity:

Collaboration diagram for ScoreTextEntity:

Public Member Functions

- ScoreTextEntity ()

  Construct a new Score Text Entity object.
- ~ScoreTextEntity ()

  Destroy a new Score Text Entity object.
- const shared::games::components::ComponentsMap & getComponents (void) const noexcept override

  Get the Components object.

3.6.1 Member Function Documentation

3.6.1.1 getComponents()

```
const shared::games::components::ComponentsMap & ScoreTextEntity::getComponents (
            void  ) const  [override], [noexcept]
```

Get the Components object.

Returns

const components::ComponentsMap&

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

- entities/texts/score/ScoreTextEntity.hpp
- entities/texts/score/ScoreTextEntity.cpp

3.7 SnakeBodyDisplayable Class Reference

Inheritance diagram for SnakeBodyDisplayable:

Collaboration diagram for SnakeBodyDisplayable:

Public Member Functions

- SnakeBodyDisplayable (const entity::IEntity &entity, Vector2i position)

  Construct a new Snake Body Displayable object.
- ∼SnakeBodyDisplayable ()

  Destroy a new Snake Body Displayable object.
- const components::ComponentType getType () const noexcept override

  Get the Type object.
- const entity::IEntity & getEntity () noexcept override

  Get the entity object.
- Vector2u & getSize (void) noexcept override

  Get the Size object.
- unsigned int & getZIndex (void) noexcept override

  Get the ZIndex object.
- components::TextureProps & getTextureProps (void) noexcept override

  Get the TextureProps object.
- void onMousePress (std::shared_ptr< IGame > &ctx) override

  handle the mouse press event
- void onMouseHover (std::shared_ptr< IGame > &ctx) override

  handle the mouse hover event
- void onMouseRelease (std::shared_ptr< IGame > &ctx) override

  handle the mouse release event
- void setPosition (Vector2i pos) noexcept

  Set the Position object.
- void setOldPosition (Vector2i pos) noexcept

  Set the Old Position object.
- Vector2i & getPosition (void) noexcept override

  Get the Position object.
- Vector2i & getOldPosition (void) noexcept

  Get the Old Position object.

Public Attributes

- Vector2i **_position**
- Vector2i **_oldPosition**

3.7.1 Constructor & Destructor Documentation

3.7.1.1 SnakeBodyDisplayable()

```
SnakeBodyDisplayable::SnakeBodyDisplayable (
            const entity::IEntity & entity,
            Vector2i position )  [explicit]
```

Construct a new Snake Body Displayable object.

Parameters

entity	
position	

3.7.2 Member Function Documentation

3.7.2.1 getEntity()

```
const entity::IEntity & SnakeBodyDisplayable::getEntity ( ) [override], [noexcept]
```

Get the entity object.

Returns

const entity::IEntity&

3.7.2.2 getOldPosition()

```
Vector2i & SnakeBodyDisplayable::getOldPosition (
          void ) [noexcept]
```

Get the Old Position object.

Returns

Vector2i&

3.7.2.3 getPosition()

```
Vector2i & SnakeBodyDisplayable::getPosition (
          void ) [override], [noexcept]
```

Get the Position object.

Returns

Vector2i&

3.7.2.4 getSize()

```
Vector2u & SnakeBodyDisplayable::getSize (
                void  ) [override], [noexcept]
```

Get the Size object.

Returns

const Vector2u&

3.7.2.5 getTextureProps()

```
components::TextureProps & SnakeBodyDisplayable::getTextureProps (
                void  ) [override], [noexcept]
```

Get the TextureProps object.

Returns

components::TextureProps&

3.7.2.6 getType()

```
const components::ComponentType SnakeBodyDisplayable::getType ( ) const  [override], [noexcept]
```

Get the Type object.

Returns

const components::ComponentType

3.7.2.7 getZIndex()

```
unsigned int & SnakeBodyDisplayable::getZIndex (
                void  ) [override], [noexcept]
```

Get the ZIndex object.

Returns

unsigned int&

3.7.2.8 onMouseHover()

```
void SnakeBodyDisplayable::onMouseHover (
                std::shared_ptr< IGame > & ctx ) [override]
```

handle the mouse hover event

Parameters

ctx	

Returns

    void

3.7.2.9 onMousePress()

```
void SnakeBodyDisplayable::onMousePress (
            std::shared_ptr< IGame > & ctx )  [override]
```

handle the mouse press event

Parameters

ctx	

Returns

    void

3.7.2.10 onMouseRelease()

```
void SnakeBodyDisplayable::onMouseRelease (
            std::shared_ptr< IGame > & ctx )  [override]
```

handle the mouse release event

Parameters

ctx	

Returns

    void

3.7.2.11 setOldPosition()

```
void SnakeBodyDisplayable::setOldPosition (
            Vector2i pos )  [noexcept]
```

Set the Old Position object.

Parameters

pos	

Returns

void

3.7.2.12   setPosition()

```
void SnakeBodyDisplayable::setPosition (
            Vector2i pos )  [noexcept]
```

Set the Position object.

Parameters

pos	

Returns

void

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

- entities/snake_body/components/SnakeBodyDisplayable.hpp
- entities/snake_body/components/SnakeBodyDisplayable.cpp

3.8   SnakeBodyEntity Class Reference

Inheritance diagram for SnakeBodyEntity:

Collaboration diagram for SnakeBodyEntity:

Public Member Functions

- SnakeBodyEntity (Vector2i position)

    Construct a new Snake Body Entity object.
- ∼SnakeBodyEntity ()

    Destroy a new Snake Body Entity object.
- const components::ComponentsMap & getComponents (void) const noexcept override

    Get the Components object.

3.8.1 Constructor & Destructor Documentation

3.8.1.1 SnakeBodyEntity()

```
SnakeBodyEntity::SnakeBodyEntity (
            Vector2i position )
```

Construct a new Snake Body Entity object.

Parameters

position	

3.8.2 Member Function Documentation

3.8.2.1 getComponents()

```
const components::ComponentsMap & SnakeBodyEntity::getComponents (
            void ) const [override], [noexcept]
```

Get the Components object.

Returns

const components::ComponentsMap&

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

- entities/snake_body/SnakeBodyEntity.hpp
- entities/snake_body/SnakeBodyEntity.cpp

3.9 SnakeGame Class Reference

Inheritance diagram for SnakeGame:

Collaboration diagram for SnakeGame:

Public Member Functions

- **SnakeGame** ()

    Construct a new Snake Game object.
- **∼SnakeGame** ()

    Destroy a new Snake Game object.
- void **compute** (DeltaTime dt) override

    Compute the game based on the DeltaTime dt.
- const GameManifest & **getManifest** () const noexcept override

    Get the game manifest object.
- const Vector2u **getSize** (void) const noexcept override

    Get the Size object.
- const entity::EntitiesMap & **getEntities** (void) const override

    Get the Entities object.
- const unsigned int **getFps** (void) const noexcept override

    Get the Fps object.
- void **moveSnake** ()

    Move the snake.
- void **updatePosition** ()

    Update the position of the snake.
- bool **hasHeadMoved** (auto it)

    Check if the head has moved.
- Vector2i **updateBodyPositions** (auto it)

    Update the body positions.
- void **updateTailPosition** (Vector2i)

    Update the tail position.

3.9.1 Member Function Documentation

3.9.1.1 compute()

```
void SnakeGame::compute (
            DeltaTime dt ) [override]
```

Compute the game based on the DeltaTime dt.

Parameters

dt	

3.9.1.2 getEntities()

```
const entity::EntitiesMap & SnakeGame::getEntities (
            void ) const [override]
```

Get the Entities object.

Returns

const entity::EntitiesMap&

3.9.1.3 getFps()

```
const unsigned int SnakeGame::getFps (
            void ) const  [override], [noexcept]
```

Get the Fps object.

Returns

const unsigned int

3.9.1.4 getManifest()

```
const GameManifest & SnakeGame::getManifest ( ) const  [override], [noexcept]
```

Get the game manifest object.

Returns

const GameManifest&

3.9.1.5 getSize()

```
const Vector2u SnakeGame::getSize (
            void ) const  [override], [noexcept]
```

Get the Size object.

Returns

const Vector2u

3.9.1.6 hasHeadMoved()

```
bool SnakeGame::hasHeadMoved (
            auto it )
```

Check if the head has moved.

Parameters

it	

Returns

 bool

3.9.1.7 updateBodyPositions()

```
Vector2i SnakeGame::updateBodyPositions (
            auto it )
```

Update the body positions.

Parameters

it	

Returns

 The tail position after the update

3.9.1.8 updateTailPosition()

```
void SnakeGame::updateTailPosition (
            Vector2i tailNewPosition )
```

Update the tail position.

Parameters

position	

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

- game/SnakeGame.hpp
- game/SnakeGame.cpp

3.10 SnakeGameProvider Class Reference

Inheritance diagram for SnakeGameProvider:

Collaboration diagram for SnakeGameProvider:

Public Member Functions

- const shared::games::GameManifest & **getManifest** () const noexcept override
- std::shared_ptr< shared::games::IGame > **createInstance** () override

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

- SnakeGameProvider.hpp
- SnakeGameProvider.cpp

3.11 SnakeHeadDisplayable Class Reference

Inheritance diagram for SnakeHeadDisplayable:

Collaboration diagram for SnakeHeadDisplayable:

Public Member Functions

- SnakeHeadDisplayable (const entity::IEntity &entity)

    Construct a new Snake Head Displayable object.
- ∼SnakeHeadDisplayable ()

    Destroy a new Snake Head Keyboard object.
- const components::ComponentType getType () const noexcept override

    Get the Type object.
- const entity::IEntity & getEntity () noexcept override

    Get the entity object.
- Vector2u & getSize (void) noexcept override

    Get the Size object.
- unsigned int & getZIndex (void) noexcept override

    Get the ZIndex object.
- components::TextureProps & getTextureProps (void) noexcept override

    Get the TextureProps object.
- void onMousePress (std::shared_ptr< IGame > &ctx) override

    handle the mouse press event
- void onMouseHover (std::shared_ptr< IGame > &ctx) override

    handle the mouse hover event
- void onMouseRelease (std::shared_ptr< IGame > &ctx) override

    handle the mouse release event
- void setPosition (Vector2i pos) noexcept

    Set the Position object.
- void setOldPosition (Vector2i pos) noexcept

    Set the Old Position object.
- Vector2i & getPosition (void) noexcept override

    Get the Position object.
- Vector2i & getOldPosition (void) noexcept

    Get the Old Position object.

Public Attributes

- Vector2i **_position**
- Vector2i **_oldPosition**

3.11.1 Constructor & Destructor Documentation

3.11.1.1 SnakeHeadDisplayable()

```
SnakeHeadDisplayable::SnakeHeadDisplayable (
          const entity::IEntity & entity )  [explicit]
```

Construct a new Snake Head Displayable object.

Parameters

entity	

3.11.2 Member Function Documentation

3.11.2.1 getEntity()

```
const entity::IEntity & SnakeHeadDisplayable::getEntity ( )  [override], [noexcept]
```

Get the entity object.

Returns

const entity::IEntity&

3.11.2.2 getOldPosition()

```
Vector2i & SnakeHeadDisplayable::getOldPosition (
          void )  [noexcept]
```

Get the Old Position object.

Returns

Vector2i&

3.11.2.3 getPosition()

```
Vector2i & SnakeHeadDisplayable::getPosition (
            void  ) [override], [noexcept]
```

Get the Position object.

Returns

Vector2i&

3.11.2.4 getSize()

```
Vector2u & SnakeHeadDisplayable::getSize (
            void  ) [override], [noexcept]
```

Get the Size object.

Returns

const Vector2u&

3.11.2.5 getTextureProps()

```
components::TextureProps & SnakeHeadDisplayable::getTextureProps (
            void  ) [override], [noexcept]
```

Get the TextureProps object.

Returns

components::TextureProps&

3.11.2.6 getType()

```
const components::ComponentType SnakeHeadDisplayable::getType ( ) const  [override], [noexcept]
```

Get the Type object.

Returns

const components::ComponentType

3.11.2.7 getZIndex()

```
unsigned int & SnakeHeadDisplayable::getZIndex (
            void  ) [override], [noexcept]
```

Get the ZIndex object.

Returns

unsigned int&

3.11.2.8 onMouseHover()

```
void SnakeHeadDisplayable::onMouseHover (
            std::shared_ptr< IGame > & ctx ) [override]
```

handle the mouse hover event

Parameters

ctx	

Returns

void

3.11.2.9 onMousePress()

```
void SnakeHeadDisplayable::onMousePress (
            std::shared_ptr< IGame > & ctx ) [override]
```

handle the mouse press event

Parameters

ctx	

Returns

void

3.11.2.10 onMouseRelease()

```
void SnakeHeadDisplayable::onMouseRelease (
            std::shared_ptr< IGame > & ctx )  [override]
```

handle the mouse release event

Parameters

ctx	

Returns

> void

3.11.2.11 setOldPosition()

```
void SnakeHeadDisplayable::setOldPosition (
            Vector2i pos )  [noexcept]
```

Set the Old Position object.

Parameters

pos	

Returns

> void

3.11.2.12 setPosition()

```
void SnakeHeadDisplayable::setPosition (
            Vector2i pos )  [noexcept]
```

Set the Position object.

Parameters

pos	

Returns

> void

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

- entities/snake_head/components/SnakeHeadDisplayable.hpp
- entities/snake_head/components/SnakeHeadDisplayable.cpp

3.12 SnakeHeadEntity Class Reference

Inheritance diagram for SnakeHeadEntity:

Collaboration diagram for SnakeHeadEntity:

Public Member Functions

- SnakeHeadEntity ()

    Construct a new Snake Head Entity object.
- ∼SnakeHeadEntity ()

    Destroy a new Snake Head Entity object.
- const components::ComponentsMap & getComponents (void) const noexcept override

    Get the Components object.

3.12.1 Member Function Documentation

3.12.1.1 getComponents()

```
const components::ComponentsMap & SnakeHeadEntity::getComponents (
            void ) const [override], [noexcept]
```

Get the Components object.

Returns

const components::ComponentsMap&

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

- entities/snake_head/SnakeHeadEntity.hpp
- entities/snake_head/SnakeHeadEntity.cpp

3.13 SnakeHeadKeyboard Class Reference

Inheritance diagram for SnakeHeadKeyboard:

Collaboration diagram for SnakeHeadKeyboard:

Public Types

- enum [Direction](#) { **UP** , **DOWN** , **LEFT** , **RIGHT** }

    Enum for the direction of the snake.

Public Member Functions

- [SnakeHeadKeyboard](#) (const entity::IEntity &entity)

    Construct a new Snake Head Keyboard object.

- [∼SnakeHeadKeyboard](#) ()

    Destroy a new Snake Head Keyboard object.

- const components::ComponentType [getType](#) () const noexcept override

    Get the Type object.

- const entity::IEntity & [getEntity](#) () noexcept override

    Get the entity object.

- void [onKeyPress](#) (std::shared_ptr< IGame > &ctx, KeyData keyData) override

    handle the key press event

- void [onKeyRelease](#) (std::shared_ptr< IGame > &ctx, KeyData key) override

    handle the key release event

Public Attributes

- [Direction](#) **_direction**

3.13.1 Constructor & Destructor Documentation

3.13.1.1 SnakeHeadKeyboard()

```
SnakeHeadKeyboard::SnakeHeadKeyboard (
            const entity::IEntity & entity ) [explicit]
```

Construct a new Snake Head Keyboard object.

Parameters

entity	

3.13.2 Member Function Documentation

3.13.2.1 getEntity()

```
const entity::IEntity & SnakeHeadKeyboard::getEntity ( ) [override], [noexcept]
```

Get the entity object.

Returns

const entity::IEntity&

3.13.2.2 getType()

```
const components::ComponentType SnakeHeadKeyboard::getType ( ) const  [override], [noexcept]
```

Get the Type object.

Returns

const components::ComponentType

3.13.2.3 onKeyPress()

```
void SnakeHeadKeyboard::onKeyPress (
            std::shared_ptr< IGame > & ctx,
            KeyData keyData )  [override]
```

handle the key press event

Parameters

ctx	
keyData	

Returns

void

3.13.2.4 onKeyRelease()

```
void SnakeHeadKeyboard::onKeyRelease (
            std::shared_ptr< IGame > & ctx,
            KeyData key )  [override]
```

handle the key release event

Parameters

ctx	
key	

Returns

void

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

- entities/snake_head/components/SnakeHeadKeyboard.hpp
- entities/snake_head/components/SnakeHeadKeyboard.cpp

3.14 SnakeTailDisplayable Class Reference

Inheritance diagram for SnakeTailDisplayable:

Collaboration diagram for SnakeTailDisplayable:

Public Member Functions

- SnakeTailDisplayable (const entity::IEntity &entity)

    Construct a new Snake Tail Displayable object.
- ∼SnakeTailDisplayable ()

    Destroy a new Snake Tail Keyboard object.
- const components::ComponentType getType () const noexcept override

    Get the Type object.
- const entity::IEntity & getEntity () noexcept override

    Get the entity object.
- Vector2u & getSize (void) noexcept override

    Get the Size object.
- unsigned int & getZIndex (void) noexcept override

    Get the ZIndex object.
- components::TextureProps & getTextureProps (void) noexcept override

    Get the TextureProps object.
- void onMousePress (std::shared_ptr< IGame > &ctx) override

    handle the mouse press event
- void onMouseHover (std::shared_ptr< IGame > &ctx) override

    handle the mouse hover event
- void onMouseRelease (std::shared_ptr< IGame > &ctx) override

    handle the mouse release event
- void setPosition (Vector2i pos) noexcept

    Set the Position object.
- void setOldPosition (Vector2i pos) noexcept

    Set the Old Position object.
- Vector2i & getPosition (void) noexcept override

    Get the Position object.
- Vector2i & getOldPosition (void) noexcept

    Get the Old Position object.

Public Attributes

- Vector2i **_position**
- Vector2i **_oldPosition**

3.14.1 Constructor & Destructor Documentation

3.14.1.1 SnakeTailDisplayable()

```
SnakeTailDisplayable::SnakeTailDisplayable (
            const entity::IEntity & entity ) [explicit]
```

Construct a new Snake Tail Displayable object.

Parameters

entity	

3.14.2 Member Function Documentation

3.14.2.1 getEntity()

```
const entity::IEntity & SnakeTailDisplayable::getEntity ( ) [override], [noexcept]
```

Get the entity object.

Returns

const entity::IEntity&

3.14.2.2 getOldPosition()

```
Vector2i & SnakeTailDisplayable::getOldPosition (
            void ) [noexcept]
```

Get the Old Position object.

Returns

Vector2i&

3.14.2.3 getPosition()

```
Vector2i & SnakeTailDisplayable::getPosition (
            void  ) [override], [noexcept]
```

Get the Position object.

Returns

Vector2i&

3.14.2.4 getSize()

```
Vector2u & SnakeTailDisplayable::getSize (
            void  ) [override], [noexcept]
```

Get the Size object.

Returns

const Vector2u&

3.14.2.5 getTextureProps()

```
components::TextureProps & SnakeTailDisplayable::getTextureProps (
            void  ) [override], [noexcept]
```

Get the TextureProps object.

Returns

components::TextureProps&

3.14.2.6 getType()

```
const components::ComponentType SnakeTailDisplayable::getType ( ) const  [override], [noexcept]
```

Get the Type object.

Returns

const components::ComponentType

3.14.2.7 **getZIndex()**

```
unsigned int & SnakeTailDisplayable::getZIndex (
            void  ) [override], [noexcept]
```

Get the ZIndex object.

Returns

unsigned int&

3.14.2.8 **onMouseHover()**

```
void SnakeTailDisplayable::onMouseHover (
            std::shared_ptr< IGame > & ctx )  [override]
```

handle the mouse hover event

Parameters

ctx	

Returns

void

3.14.2.9 **onMousePress()**

```
void SnakeTailDisplayable::onMousePress (
            std::shared_ptr< IGame > & ctx )  [override]
```

handle the mouse press event

Parameters

ctx	

Returns

void

3.14.2.10 onMouseRelease()

```
void SnakeTailDisplayable::onMouseRelease (
            std::shared_ptr< IGame > & ctx )  [override]
```

handle the mouse release event

Parameters

ctx	

Returns

void

3.14.2.11 setOldPosition()

```
void SnakeTailDisplayable::setOldPosition (
            Vector2i pos )  [noexcept]
```

Set the Old Position object.

Parameters

pos	

Returns

void

3.14.2.12 setPosition()

```
void SnakeTailDisplayable::setPosition (
            Vector2i pos )  [noexcept]
```

Set the Position object.

Parameters

pos	

Returns

void

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

- entities/snake_tail/components/SnakeTailDisplayable.hpp
- entities/snake_tail/components/SnakeTailDisplayable.cpp

3.15 SnakeTailEntity Class Reference

Inheritance diagram for SnakeTailEntity:

Collaboration diagram for SnakeTailEntity:

Public Member Functions

- SnakeTailEntity ()

    Construct a new Snake Tail Entity object.
- ∼SnakeTailEntity ()

    Destroy a new Snake Tail Entity object.
- const components::ComponentsMap & getComponents (void) const noexcept override

    Get the Components object.

3.15.1 Member Function Documentation

3.15.1.1 getComponents()

```
const components::ComponentsMap & SnakeTailEntity::getComponents (
            void ) const  [override], [noexcept]
```

Get the Components object.

Returns

    const components::ComponentsMap&

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

- entities/snake_tail/SnakeTailEntity.hpp
- entities/snake_tail/SnakeTailEntity.cpp

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