**Changed the identity variable to the buildState.getIdentity method call in the if statement of drawEnergies method and also changed the gsm.getCurrentState method to the GSM.getCurrentState method in the drawEnergies method located in the GameState class.**

**package** sonar;

**import** java.awt.Graphics;

**import** java.awt.image.BufferedImage;

**import** java.io.IOException;

**import** javax.imageio.ImageIO;

**import** sonar.gamestates.states.Inventory;

**import** sonar.gamestates.states.levels.stages.entities.SpriteManager;

**import** sonar.gamestates.states.levels.stages.entities.animations.tiles.Tile;

**import** sonar.gamestates.states.levels.stages.entities.animations.tiles.TileManager;

**public** **abstract** **class** GameState

{

//The base class Template for all the gamestates in the game.

**private** **static** StateBuilder *buildState*;

**private** **static** GSM *gsm*;

**private** **static** Keyboard *key*; //Can be made static

**private** **static** SpriteManager *smanage*; //Can be made static

**private** **static** TileManager *tmanage*; //Can be made static

**private** **static** **int**[] *tiles*;

**private** **static** **int** *width*, *height*;

**private** String identity;

**final** **static** **void** setGSM(GSM cGSM){*gsm* = cGSM;}

**final** **static** GSM getGSM(){**return** *gsm*;}

**protected** **final** **static** **void** createGameState(**final** StateBuilder cBuild)

{

*buildState* = cBuild;

**if**(*buildState*.stateType().equals("Single"))

{

*key* = **new** Keyboard(*getGSM*());

*smanage* = **new** SpriteManager(*buildState*.getIdentity());

*tmanage* = **new** TileManager(*smanage*);

}

**if**(!*buildState*.getIdentity().equals("Starter"))

{

**if**(*buildState*.stateType().equals("Dual"))

{

DualStateBuilder dual = (DualStateBuilder) *buildState*;

*loadPath*(dual.getPath());

}

**if**(*buildState*.stateType().equals("Single"))

{

SingleStateBuilder single = (SingleStateBuilder) *buildState*;

*loadPath*(single.getPath()); //Added loadPath

}

}

}

**private** **final** **static** **void** loadPath(String path)

{

**try**

{

BufferedImage image = ImageIO.*read*(GameState.**class**.getResource(path));

*width* = image.getWidth();

*height* = image.getHeight();

*tiles* = **new** **int**[*width* \* *height*];

image.getRGB(0, 0, *width*, *height*, *tiles*, 0, *width*);

}

**catch** (IOException e)

{

e.printStackTrace();

}

}

**protected** **void** update()

{

}

**protected** **void** render(**int** xScroll, **int** yScroll, Screen screen, Graphics g)

{

Screen.*setOffset*(xScroll, yScroll);

drawTiles(xScroll, yScroll, screen);

drawWeapons(screen);

drawEnergies(screen);

}

**private** **void** drawEnergies(Screen screen)

{

**if**(*buildState*.getIdentity().equals("Inventory"))

{

Inventory inv = (Inventory) GSM.*getCurrentState*();

inv.renderEnergies(screen);

}

}

**private** **void** drawWeapons(Screen screen)

{

**if**(identity.equals("Inventory"))

{

Inventory inv = (Inventory) *gsm*.*getCurrentState*();

inv.renderWeapons(screen);

}

}

**public** **void** drawTiles(**int** xScroll, **int** yScroll, Screen screen)

{

**if**(*tmanage* != **null**)

{

**int** x0 = xScroll / *tmanage*.voidTile.getWidth(); //divided by 16

**int** x1 = (xScroll + screen.*getWidth*() + *tmanage*.voidTile.getWidth()) / *tmanage*.voidTile.getWidth();

**int** y0 = yScroll / *tmanage*.voidTile.getHeight();

**int** y1 = (yScroll + screen.*getHeight*() + *tmanage*.voidTile.getHeight()) / *tmanage*.voidTile.getHeight();

drawGameState(x0, x1, y0, y1, screen);

}

}

**private** **void** drawGameState(**int** x0, **int** x1, **int** y0, **int** y1, Screen screen)

{

**for**(**int** y = y0; y < y1; y++)

{

**for**(**int** x = x0; x < x1; x++)

{

getTile(x, y).render(x, y, screen);

}

}

}

Tile getTile(**int** x, **int** y)

{

Tile tile = *tmanage*.voidTile;

**if**(x < 0 || y < 0 || x >= *width* || y >= *height*) **return** tile;

**if**(identity.equals("Menu"));

**if**(identity.equals("Password")) tile = invpassCommons(identity, x, y, tile);

**if**(identity.equals("Inventory")) tile = invpassCommons(identity, x, y, tile);

**if**(identity.equals("Starter"))

{

**if**(tileColour(x, y) == TileManager.***grassColour***) tile = *tmanage*.grass;

}

**return** tile;

}

**private** Tile invpassCommons(String identity, **int** x, **int** y, Tile tile)

{

**if**(tileColour(x, y) == TileManager.***cornerUpLeftColour***) tile = *tmanage*.cornerUpLeft;

**if**(tileColour(x, y) == TileManager.***cornerUpRightColour***) tile = *tmanage*.cornerUpRight;

**if**(tileColour(x, y) == TileManager.***cornerDownLeftColour***) tile = *tmanage*.cornerDownLeft;

**if**(tileColour(x, y) == TileManager.***cornerDownRightColour***) tile = *tmanage*.cornerDownRight;

**if**(tileColour(x, y) == TileManager.***lineUpColour***) tile = *tmanage*.lineUp;

**if**(tileColour(x, y) == TileManager.***lineDownColour***) tile = *tmanage*.lineDown;

**if**(tileColour(x, y) == TileManager.***lineLeftColour***) tile = *tmanage*.lineLeft;

**if**(tileColour(x, y) == TileManager.***lineRightColour***) tile = *tmanage*.lineRight;

**if**(tileColour(x, y) == TileManager.***squareColour***) tile = *tmanage*.square;

**return** tile;

}

**private** **int** tileColour(**int** x, **int** y){**return** *tiles*[x + y \* *width*];}

StateBuilder getBuildState(){**return** *buildState*;}

**protected** GSM getGsm(){**return** *gsm*;}

**public** Keyboard getKey(){**return** *key*;}

**protected** **void** resetKeyboard(){*key* = **null**;}

**protected** **void** initKey(){*key* = **new** Keyboard(*gsm*);}

**public** SpriteManager getSmanage(){**return** *smanage*;}

**public** TileManager getTmanage(){**return** *tmanage*;}

**protected** **void** resetSmanage(){*smanage* = **null**;}

**protected** **void** setSmanage(SpriteManager manage){*smanage* = manage;}

**protected** **void** resetTmanage(){*tmanage* = **null**;}

**protected** **void** setTmanage(TileManager manage){*tmanage* = manage;}

**protected** String getIdentity(){**return** identity;}

**public** **void** setTiles(**int**[] tiles){**this**.*tiles* = tiles;}

**public** **void** setWidth(**int** value){*width* = value;}

**public** **void** setHeight(**int** value){*height* = value;}

**void** setBuildState(StateBuilder state){*buildState* = state;}

}