

Sprint 3 Plan
C# Game Engine
Sharp Slugs
Revision 1
November 5, 2018

GOAL: For this sprint we want a basic camera system and physic implementation, including collision and triggers.

Task Listing:

1. As a game designer I want a world space coordinate system so that a larger world can be taken care of.
 1. (8) Create a coordinate system that can be referenced within the system as an abstraction from pixels. (Harpreet)
 2. (5) Create helper class that can convert between abstract coordinate system and the pixel coordinates. (Timothy)
 3. (5) Edit the sprites to be able to use the coordinate system. (Andrew)
 4. (8) Edit mouse class to be able to use the coordinate system. (Timothy)
2. As a game designer I want a camera system so that the viewpoint can be moved around.
 1. (13) Create camera with internal buffer to draw at specified position on GraphicsManager buffer. (Sean)
 2. (8) Draw relevant world objects onto camera buffer every draw cycle. (Harpreet)
3. As a game designer I want a way to detect collisions between game objects so that they can interact with each other.
 1. (8) Create basic rectangular and elliptical hit detection around sprites. (Andrew)
 2. (8) Create triangular hit detection. (Harpreet)
 3. (13) Create polygonal hit detection around sprites. (Sean)
4. As a game designer I want a way to put triggers in the game so that automatic events can take place.
 1. (8) Create basic event system with sprites that hooks into current event system. (Timothy)
 2. (5) Add settings for how the triggers should handle certain kind of collisions. (Timothy)
5. As a game designer I want systems such as gravity and velocity so that the game can have more of a real feel to it.
 1. (5) Create manager for velocity on each sprite. (Andrew)
 2. (3) Create manager for gravity on each sprite. (Andrew)
 3. (8) Integrate manager system with collision detection for both velocity and gravity. (Andrew)

Team Roles:

Sean Riley: Product Owner, Developer, Programmer

Harpreet Singh: Developer, Programmer

Andrew Purcell: Developer, Programmer

Timothy Su: Scrum Master, Developer, Programmer

Initial task assignment:

Sean Riley (26)

- Story 2
 - Task 1
- Story 3
 - Task 3

Harpreet Singh (24)

- Story 1
 - Task 1
- Story 2
 - Task 2
- Story 3
 - Task 2

Andrew Purcell (29)

- Story 1
 - Task 3
- Story 5

Timothy Su (26)

- Story 1
 - Task 2
 - Task 4
- Story 4