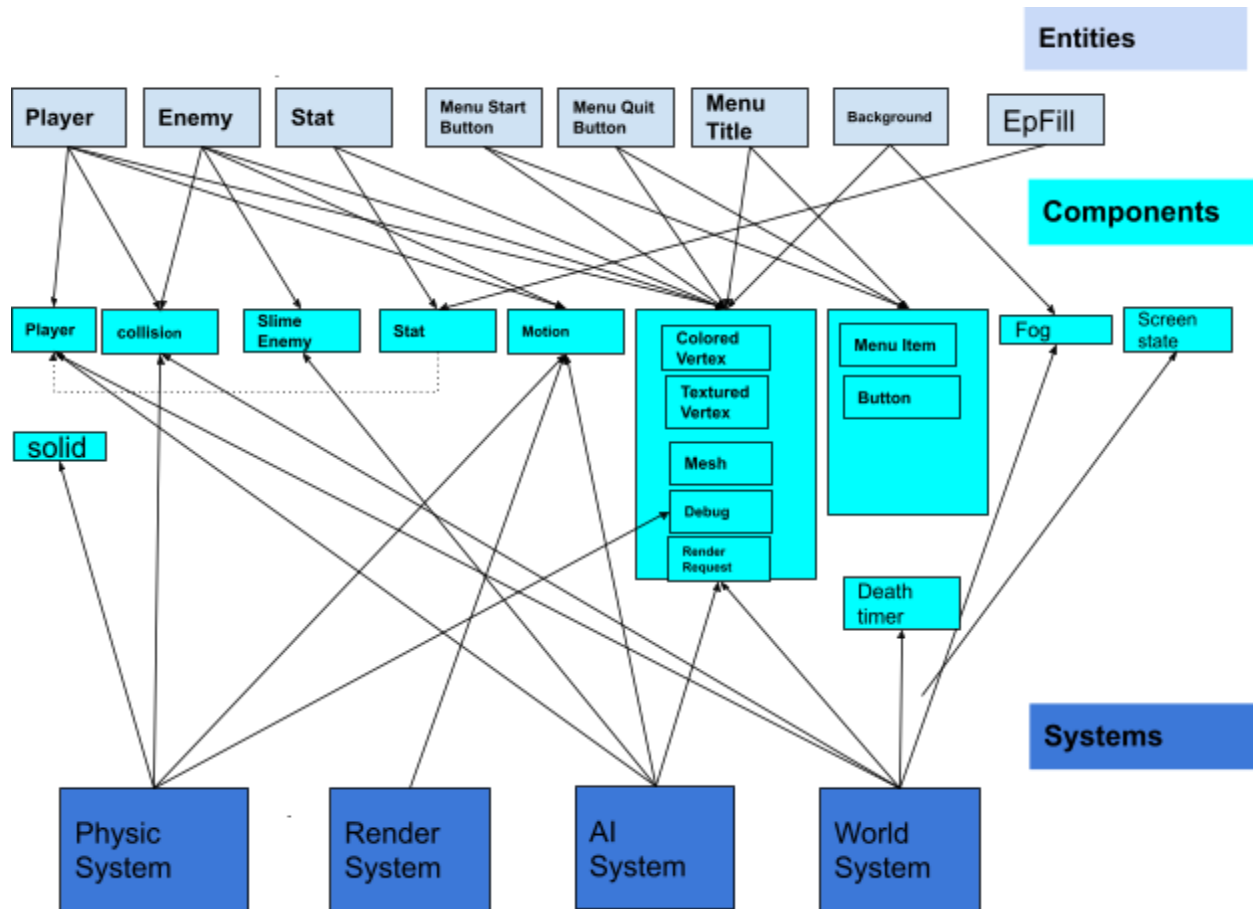**ECS Documentation**

Team ID: 6

Diagram 1. ECS diagram for Adrift Game

Entities (defined as constructors in world_init)
- Player
- Enemy
- Stats
- Menu Start Button
- Menu Quit Button
- Menu Title
- Background
- Epfill

Components (defined as structs in components.hpp)
- Player
- Stat (EP- energy points, Hp - health points , MP - magic points)
- Collision

- Motion (for physics)
- Debug (from template)
- ColoredVertex (from template)
- TexturedVertex (from template)
- Mesh (from template)
- RenderRequest(from template)
- Queueable (for turn order)
- Fog
- Slime Enemy

Systems (defined as separate cpp/hpp files)
- world_system (main game loop)
- physics_system (movement_system)
- render_system
- turn_system (for turn order in battle)
- ai_system

List of Entities and their components used

Player Entity
Components used: Player, ColoredVertex, TexturedVertex, Debug, Motion, Stat , Collision, Mesh, RenderRequest

Enemy Entity
Components used: Slime Enemy, ColoredVertex, TexturedVertex, Debug, Motion, Collision, Mesh, RenderRequest

Stat
Components used: Stat, ColoredVertex, TexturedVertex, Debug, Mesh, RenderRequest

EpFill
Components used: Stat, ColoredVertex, TexturedVertex, Debug, Mesh, RenderRequest

Menu Start Button
Components used: Menu Item, Button, ColoredVertex, TexturedVertex, Debug, Mesh, RenderRequest

Menu Quit Button
Components used: Menu Item, Button, ColoredVertex, TexturedVertex, Debug, Mesh, RenderRequest

Menu Title

Components used: Menu Item, Button, ColoredVertex, TexturedVertex, Debug, Mesh, RenderRequest

Background
Components used: ColoredVertex, TexturedVertex, Debug, Mesh, RenderRequest

<u>List of Systems and their components</u>

world_system (main game loop)
Components used: Fog, Motion, Button, Menu Item, Collison

physics_system (movement_system)
Components used: Debug, Motion, Collison, solid

render_system
Components used: Motion

ai_system
Components used: Motion, Player, Slime Enemy