

## Meeting - 14/10/2021

### Attendees:

- Grey
- Marko
- Tim
- Ethan

### Topics discussed:

- Reading and understanding the assignment specification. Milestones 1 and 2 are due by week 8, but Monday wk 6 is the last day to get feedback on our UML diagram.
- Plan will be constructed in a ~~Gantt chart~~ document with bullet points.
- Begin construction of UML diagram
- All code must be test-first, with the tests uploaded to git before the code is
- Game over state: not necessary for MVP, but may be implemented in milestone 3, where other optional features can be added.

### Action items:

- Milestone 1 to be completed by Monday 18th October.
- Make plan for overall project, to be done by Friday 15th October
- Complete UML diagram and assumptions on Friday 15th, once reference implementation is released.

## Meeting - 18/10/2021

### Attendees:

- Marko
- Ethan

### Topics discussed:

- The necessity of the superclass "moving entities" as all moving entities is pretty unique.
- Battlable interface
- Got rid of weapon class, as it is just a collectable item
- Buildable as a subclass of collectable
- Use an observer pattern for goals
  - Created a GoalManager, need to think about how best to use it.

### Action items:

- Create all individual classes that implement the existing classes. To highlight everything we could have missed.
- Create another meeting tomorrow to finalise all relationships between classes when the whole team is present

## Meeting 18/10/2021

### Attendees:

- Grey
- Ethan

### Topics Discussed:

- Delegating important functionality that needs to happen on a game-wide scale to manager classes
  - Ideas:
    - collisionManager - does the collision checks on the entities, the entities list pointer is given to it on construction, also tests if player movement is valid.
    - fightManager - similar to the collisionManager, finds the entities that need to fight, and makes them fight.
- Determining collision using Z values
  - An entity's movement will only be blocked if it's Z value is lesser than the cell it's moving to.
- Incorporating design patterns into our design
  - We've already implemented Observer and State
  - Need to look for opportunities where a pattern from the course is the best course of action

#### Action Items:

- Add these to our UML class diagram
- Send to tutor for feedback

#### Meeting 19/10/2021

##### Attendees:

- Grey
- Marko
- Tim
- Ethan

##### Topics Discussed:

- General Design Discussion
  - Addressing how we should implement CollisionManager
  - Formally deciding how we should handle the priority of which actions are taken (fights, movements)
  - Went through an example situation to test all our class interactions
  - Assigned sections to each team member
    - Combat - Tim
    - Mobs and character, movement and collisions - Grey
    - Unit tests, dungeon and dungeon creation - Ethan
    - Collectable, buildable and static entities, item interactions - Marko
- Action items:
  - Ethan does the overall logic
  - Everyone else waits for that logic to implement their logic for their sections
  - Start Writing tests once logic is figured out then implementation.
  - Deadline for Tests and the majority of implementations is next meeting (28/10/2021)

## Meeting 20/10/2021

### Attendees:

- Ethan
- Tim

### Topics Discussed

- Action execution priority (per tick)
  - We considered not including a collisionManager, and instead use a movementManager that will handle all movement, collisions, and fights.

### Action Items

- Another meeting needs to be scheduled to decide upon this implementation, and re-allocate work between group members.

## Meeting 28/10/2021

### Attendees:

- Grey
- Marko
- Tim
- Ethan

### Topic Discussed

- Discussed where everyone is up to and any problems people had encountered
  - Everyone is on task and is confident they can meet their deadline
  - Problem encountered: Goals checking is very inefficient with no pattern
  - Clarified the difference between collision and interact.
    - Interact is for when two entity are on top of each other, while collision is when two entity will collide
- What pattern to use for Goal management
  - Decided to use composite pattern to manage goal checking as it allows different goals to be combined easily

### Action Items

- Finish off the rest of the implementations (deadline 30/10/2021)
- Debugging and Testing (deadline 31/10/2021)

## Meeting 31/10/21

### Attendees:

- Grey
- Marko
- Tim
- Ethan

### Topics discussed:

- Clarifying bugs due to import errors
- Fixing merge conflicts resulting from merging mobs into items+dungeon

- Stepping through current code and resolving issues
- Changed health to be of type int instead of double, to keep things simple
- All bugs fixed, program compiled
- Debugged loading maps from JSON

Meeting 1/11/21

Attendees:

- Grey
- Ethan
- Marko
- Tim

Topics Discussed:

- Resolving merge conflicts
- Ensured tests were running
- Some bug fixes
- Running the program with front end to detect other issues
- Merging final branches together
- Submission

Meeting 4/11/2021

Attendees:

- Grey
- Ethan
- Marko
- Tim

Topics Discussed:

- Reflected on milestone 2 uml feedback from tutor
- Delegated new task from feedback to each member
- Discussed the current bugs with our code

Action Items:

- Work on bug fixes
- Fix current tests to reflect bug fixes

Meeting 8/11/2021

Attendees:

- Grey
- Ethan
- Marko
- Tim

Topics Discussed:

- Merging all Milestone 2 fixes and missing features into master
- Code Review

- Code review on the new features
  - Random spider spawns
  - Random mercenary spawns
  - Persistence
- Outcome of code review:
  - Random spawns need to do their own null checking instead of delegating it to the entity factory
  - Random spider spawns needs to be tuned
    - Max Spiders 10 -> 4, need to be spawned also on every tick
  - Need a way to seed all random events on dungeon creation for the sake of better testing
  - Persistence needs to be done in a different folder, `project/build` folder on Ethan's machine just came out of nowhere? Not on others.
    - Was moved to `project/savegames`
- Splitting up work for Milestone 3
  - Written up in the planning document.

#### Meeting 11/11/2021

##### Attendees:

- Grey
- Ethan
- Marko
- Tim

##### Topics Discussed:

- Reflected on milestone 2 feedback from tutor
  - Decided to remove all comments in tests
  - Need to update UML diagram
  - Need to include more javaDoc
- Delegated new task from feedback to each member
- Discussed the current bugs with our code

##### Action Items:

- Fix tests to reflect on new movement logic
- Work on milestone 3 tasks

#### Meeting 14/11/2021

##### Attendees:

- Grey
- Ethan
- Marko
- Tim

##### Topics Discussed:

- Discussed final bugs

- How to fix bombs and destroy zombie spawner activating on diagonal not cardinally adjacent.
- How to fix spiders avoiding boulders

Action items:

- Add javaDoc to all
- Fix final bugs
- Tidy up all documentation
- Submit project