## **Design Process**

Made multiple lists of items which implement certain interfaces such as consumables to easily access lists without having to do type checking over and over again at the cost of space, however since there are not many items I thought the tradeoff would be worth it. Made the lists items rather than a list of consumables for example as it allows lists to be more generic and can be easily used in my item search field. Also means we can use functions from items (all things in inventory that implement interfaces are items) and not just the interface. All recipes contain the simple name of the class that they are so when they are crafting it is easier to build. Kept all constructors for subclasses of items the same as it allowed me to use a general get Constructor method when crafting. A field called keyNum was used in the key class to match the corresponding door since it was the easiest way to make sure if Gson initialized a key before a door did not mess up anything this would have been a problem with our previous implementation (Storing the id of the door it is connected to).

# Mileston 1 - Planning

### **Tests**

Character tests [Jeremy]

Moving entity tests [Tommy]

Unit tests- Persistence of games [Bejai]

Unit tests- Inventory [Jeremy]

System Tests -Item [Jeremyl]

Tests for Static entities [Brendan]

Various post submission tests [Brendan]

System Tests - Goals [Raphael]

#### Code

Implement - Character [Jeremy]

Implement - Inventory [Tommy]

Implement - Colliders [Tommy]

Implement - Persistence Json [Bejai]

Implement - Goals [Raphael]

Implement - Static entities + static entity subclasses [Brendan]

Implement - A way to convert items on the ground to inventory items [Brendan]

Implement - Move Interface [Tommy]

Implement - Item [Jeremy]

Add mercenaries to character [Jeremy]

Research + restructure code for Gson [Bejai]

### **Documentation**

UML diagram [Group]

Post submission UML cleanup [Brendan]

Minutes [Brendan]

Planning [Group]

Assumptions [Group]

# Mileston 2 - Planning

Refactor static class methods to work with game class – Brendan

Fix entity id, specifically because of crafting? – Jeremy

Keep monitoring gson stuff and fixing issues – Bejai

Parsing game goals – Raphael

Work with Raph on setting up classes for Goals – Bejai

Make sure all our tests pass – Jeremy

refactor dungeon controller mania – Jeremy

Mercenary that are read from the json mess up – Jeremy

Fix collision - Tommy

Implement Midnight Armour – Jeremy

Implement Assassin – Jeremy

Fix key picking up bug – Jeremy

Look into whether interact is working -Tommy

make one rings drop sometimes – Jeremy

add revive capability to player – Jeremy

I mplement sun stone – Jeremy

Test midnight armour once sun stone is done - Jeremy

fix spawner interact - Tommy

add invincibility and invisibility movement behaviours - Tommy

Write system tests for controller - Bejai

Dungeon generation - Jeremy

Fix up issues with portals and bomb placement - Brendan

Implement front end sprites for portal colours, doors openings, and key-door pairs - Brendan

Split static entity methods out of game and into helper class - Brendan

Make custom maps to test bombs, portals and exits - Brendan

Static entity tests to improve coverage - Brendan

Sun stone door implementation and tests - Brendan

Implement swamp tile -Jeremy

Implement Anduril -Jeremy

Make invisbility and invincibility potions movement patterns, invsibility should only affect merc -

Jeremy

Check previous autotests/dryrun - Bejai

Implement path finding - Jeremy

Implement hydra - Jeremy

Write system tests for game modes - Raphael