



Dungeon Manager Escapes

Group 22



Dina Zeng, Michael Plunkett, Sameer Hossain, Salman Rafiei



Intro > Overview > Enemies > Items > Refactoring

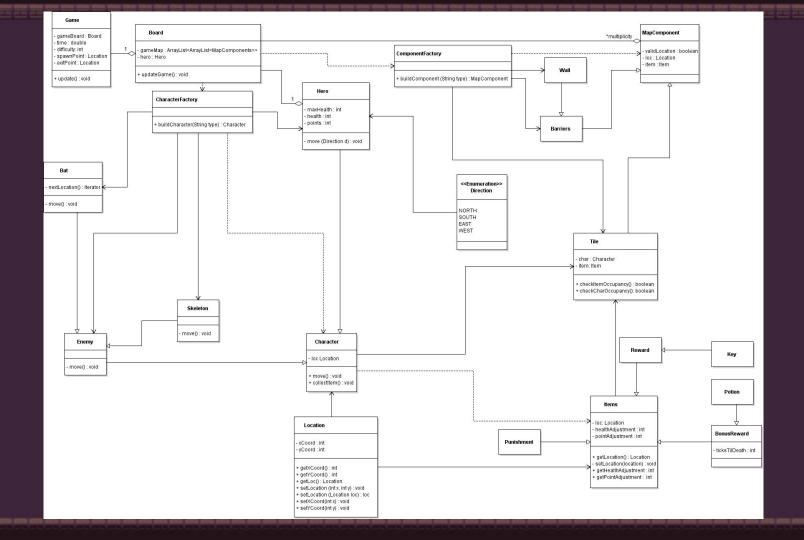
Objective

Escape! (before your health runs out)

Important game mechanics:

- Health depletes over time
- Enemies kill instantly
- Difficulty adds variation to how you play the game
- 3 levels









Enemies







- Follows the player
- Instantly ends game









- Moves in a random pattern
- Instantly ends game



Skeleton

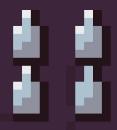
- Moves in a patrolling pattern
- Instantly ends game











Spikes



- Stationery
- Deducts player health and points
- Does NOT end the game





Items



- Key

 +25 points
 - Need to collect all keys in order to use door



Potion

- +50 points, +50 health
- Spawn randomly and despawn after fixed time



Door

- +50 pointsProceed to next level

Refactoring

- Encapsulation (a lot of it)
- Create new methods for specific tasks
 -> prevent redundant code & spaghetti code
- Creation of GameSettings class
- Successfully decreased coupling and increased cohesion, specifically within the GamePanel class

Testing

- Encapsulation did not help our tests://
- Coverage Limited (50%-70%)

Team Management

Challenges

- Implementing Potions
- Collision detection
- Conflicting Schedules
- Managing Workload

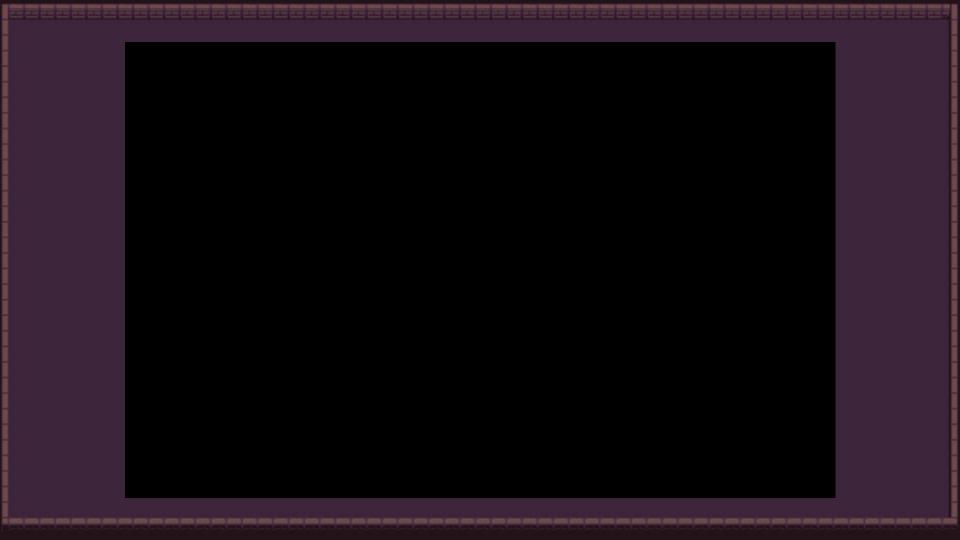
What we learned

- Git
- Java
- Team management





<u>Video</u>





THANKS

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