Class and Package Diagram for System TwitterNethack
Assignment in the course PA1415 Programvarudesign <2017-04-26>
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System description

The system is going to be based around the classic game NetHack but in 2D graphics. NetHack is a sort of adventure and roleplaying game where you create a character and goes through random generated dungeons. In the dungeons you can meet various different monsters and collect items. The final goal is to find the amulet of Yendor and escape with it alive.

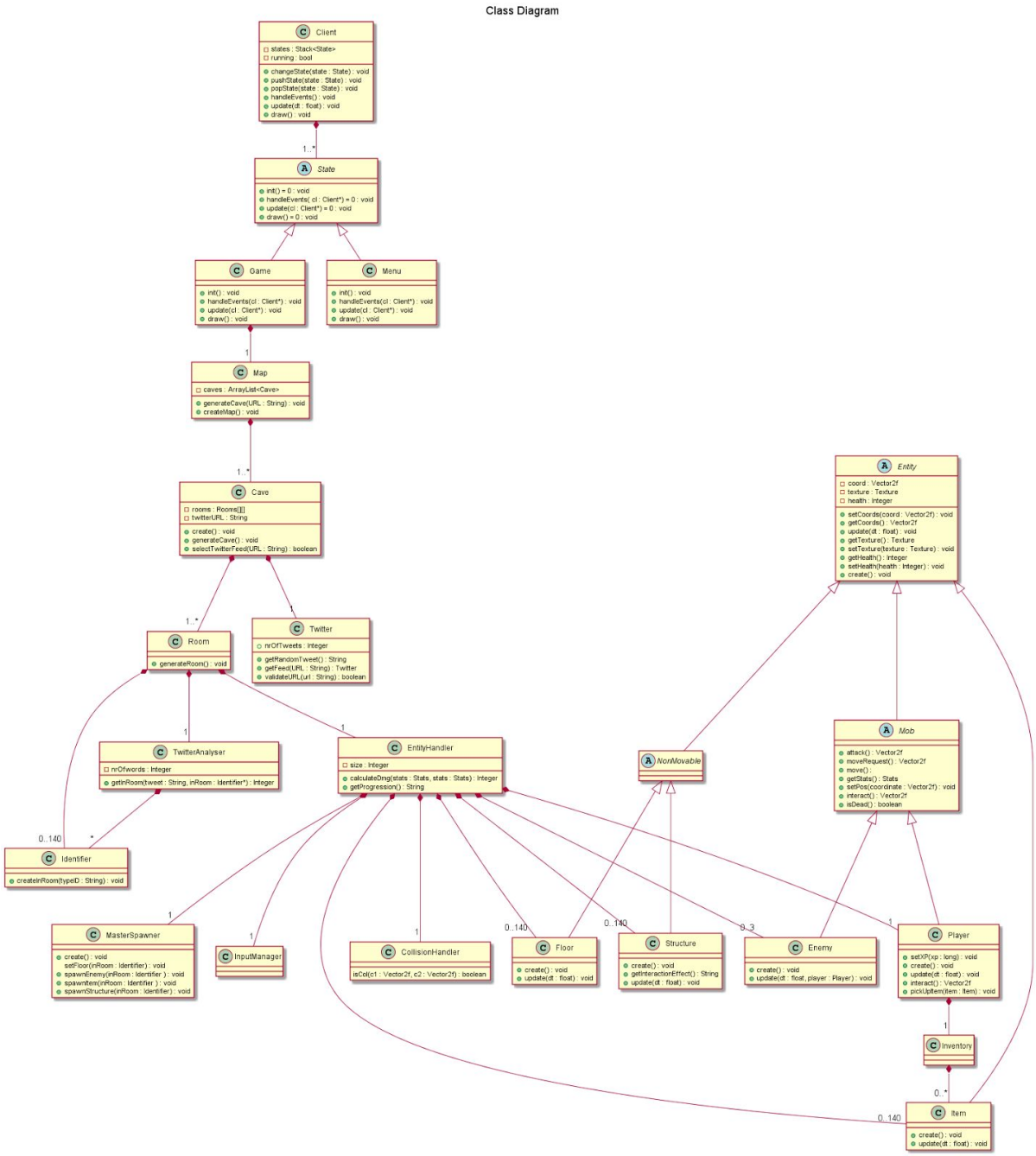
Nethack is a very advanced game and because of this and the limited time we are given, our version of NetHack is not going to include all of the features that the original have. The functionalities we are aiming to implement:

- An opening screen where you can start a new game or join an existing one.
- A screen where you can setup the character.
- Monsters and creatures that freely move around the dungeons.
- Different items to pick up and drop.
- Multiplayer support.
- Generate dungeons with help of twitter.

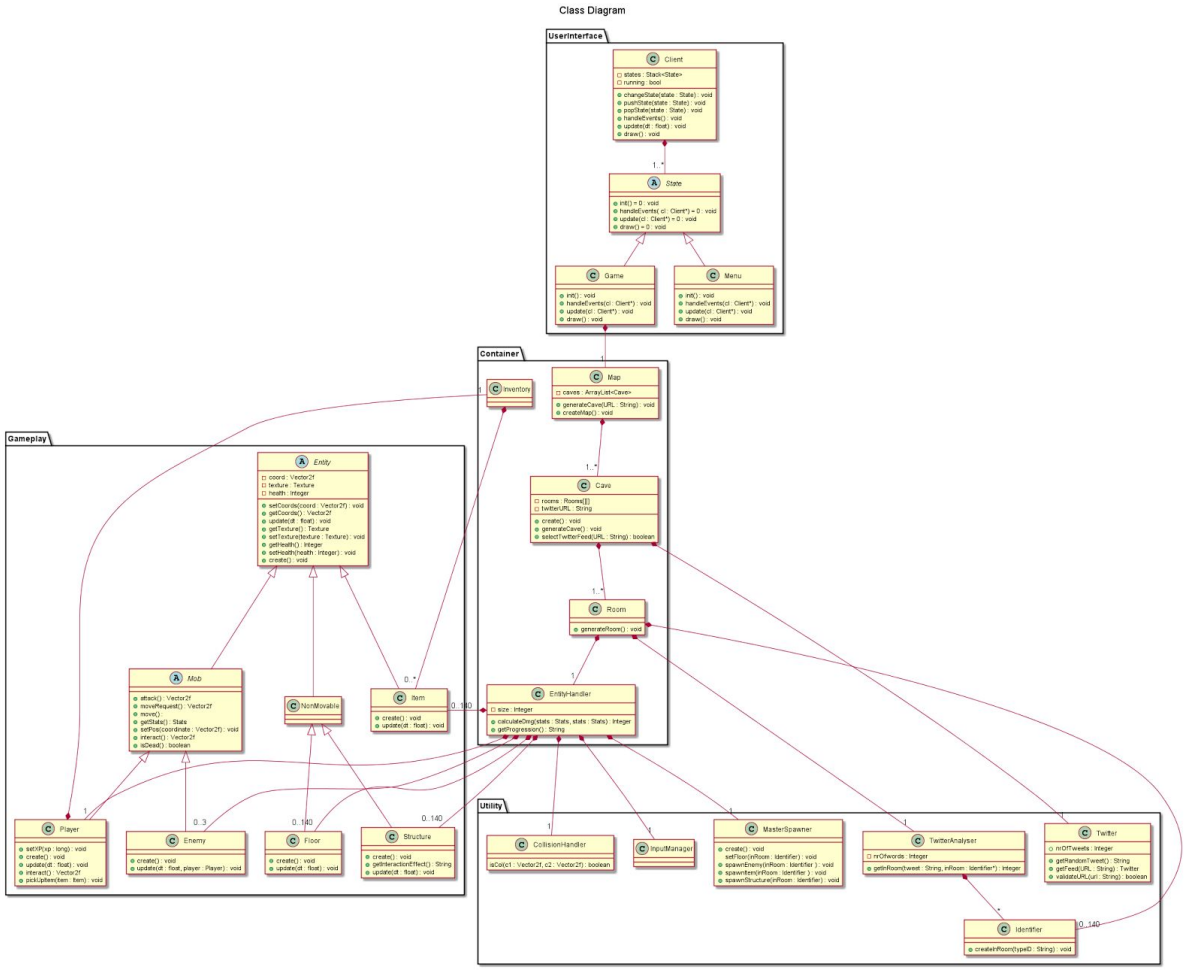
The dungeons in our NetHack version is going to be generated by the Twitter API. Its job is to read certain keywords in Twitter posts and use these to create specific types of monsters and items for every room in the game. When you enter a new cave, your system shall briefly display information about the “owner” of the cave.

Class and Package Diagram

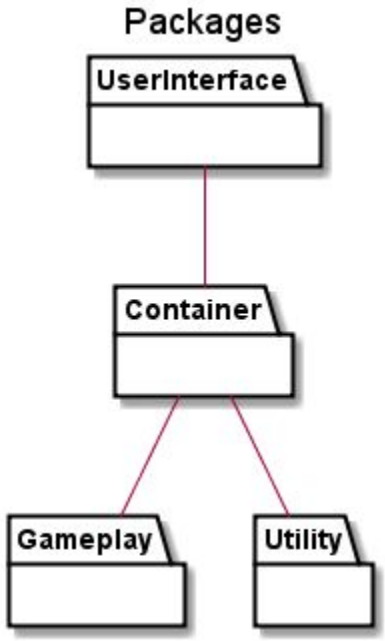
Class Diagram



Class diagram put into packages



Only packages



The UserInterface package is the presentation of the application. This is where the game window is located. When the user is using this application, this is where all the interacting is taking place.
The Container package is where all the game data is stored, like the caves and each caves' rooms. We also find the EntityHandler which as the name implies, *handles entites*. An Inventory is also included as a container because it stores items the player picks up!

The Utility package is a collection of classes that the container package makes use of. For example the CollisionHandler, which returns whether there was a collision between two objects. The selling point for this game is the Twitter integration. We use Twitter as an utility to help the game generate rooms based on tweets, gathered from Twitter.

The Gameplay package is containing all the gameplay elements you find in the game, like the enemies, the player, floors and structures.