**The experience of working with this engine.**

The game engine used in the task is not very easy to use, but in the end I was able to understand how it works.

Most of the engine is fairly easy to understand, although some parts are difficult. Especially classes as ActorLocations with hash maps <Location, Actor> and <Actor, Location>.

The class ActorLocations is used in the GameMap class. I spent a lot of time trying to figure out how the “actorLocations” attribute is initialized. There is no initialization in the constructor and there is no setter for this attribute. I finally discovered that it is initialized using the usual assignment in the World class:

gameMap.actorLocations = actorLocations;

The Game Engine package should be used as an external library without making any changes to its code. Only public methods must be used. When creating a new game using this game engine, the developer should not make any changes to the engine. But when making the assignment I couldn't follow this rule.

When I was doing the third task I couldn't find a way to avoid changing the game engine.

For example, I needed to add the quit option in the menu. To implement this, I had to create a new action: “QuitAction” and manually add it to the player options in the “processActorTurn” method.

To finish the game, I discovered that the easiest way was to kill the player. I think there must be the quit option as a part of the engine.

The second problem I encountered was the game ending due to a condition. For example, when all the humans are killed or all the zombies are vanished. And again, I had to make changes in the World class, in the “stillRunning” method.

The should be the possibility of defining conditions for the game win or game loss somewhere in the game engine.

The third problem was the days counting. Adding the voodoo, Mambo Marie I needed to know the current day. Voodoo behaviour depends on the time, so it would be comfortable to have the possibility to know the number of the day.

The fourth problem was the presence of an actor who is not on the map now. Voodoo lives off the map and appears at a random moment.

The game engine doesn’t maintain this feature because each actor must be somewhere on the map.

Despite all of the above, the game engine offers vast possibilities for creating games of various kinds.

Working with it gave me a lot of experience in game development. I knew many new ways to write professional code.