

BABA IS YOU

PROJECT ARCHITECTURE

We decided to use MVC format to divide our classes into three parts.

- Classes that will manage user input.
- Classes that will display informations on the screen.
- Classes that will manage game's data.

Here's a list of classes and a description of what they do :

GameLoop - The main loop of the game. Here we handle user input and notify the GraphicalDisplay to update display.

GameMap - The game map. We use a grid to place items on it.

Item - An item is an object that we put on the map. It have a type like for example: Skull or Water and a physic like Hot or Push.

RulesChanger - This class will observe the game map and it's words and will update items that are on it.

MovementManager - All methods that the map will use to move an item. Here we have all methods to handle all cases of movement. For example baba moves on water that is sink.

SaveManager - Saves game maps as text file an loads them.

CommandLineParser - Parse cheatcodes and execute them.

GraphicalDisplay - Creates a window and display items on it.

Point - Record to represent a point in a 2D space.

Enums :

Direction - Contains all directions : UP, LEFT, RIGHT, DOWN

GameState - Defines the state of the game : WIN, DEFEAT, NONE

ItemPhysics - Contains all item's physics like SINK, PUSH or MELT

ItemType - Contains all item's types like Baba, Skull or Water

Changes after the beta defense :

- The class Map were renamed on GameMap
- The class MapBox were deleted because it was useless
- Creation of MovementManager class to manage movement
- Deletion of GameMap argument in the Item class constructor
- Deletion of GameMap field in the Item class
- Methods in RulesChanger class were renamed for better understanding
- Creation of class SaveManager
- Creation of class GameLoop
- Creation of class GraphicalDisplay
- Creation of class CommandLineParser