

Sprint 7

1) Summary	
Sprint leader(s)	Vivien
Sprint start date	21/04/2020
Sprint end date	23/04/2020

2) Individual key contributions	
Team member	Key Contribution(s)
Neumann, Vivien	Task Cards, Requirement Analysis and double check the coursework specification (incl. open issues)
Jiao, Haotian (Hallton)	Game Agent
Wang, Mingfeng (Foret)	Game Agent
Banes, Hayden J	GUI
Tang, Zhenyu (tang)	Continue working out the previous sprints tasks

3) User stories / task card
<p>Task Card: Game Agent Priority: 1 Value: 9</p> <p>In order to play Property Tycoon with less than two human players, a game agent needs to be implemented. An agent that can take the role of 1 or more of the players. This allows for a limited number of human players to enjoy a richer gaming experience but also provides the possibility for a fully autonomous play when all of the players are provided by the program.</p> <p>For the beginning, the game agent should perform random decision making but could incorporate some simple rules for making in game decisions in a later stage. However, the emphasis is on a game agent that works well and can be used to replace one or more human players.</p>

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The game agent should throw the dice, move its token and act accordingly. They should also buy properties and develop these by building houses and hotels as well as participate in auctions. In the following, we defined the features of a game agent:

- Buy property
- Buy house and hotels
- Roll dice
- Free Parking
- Pay rent (Sprint 8)
- Auctioning (Sprint 8)
- Pot luck / opportunity cards (Sprint 8)

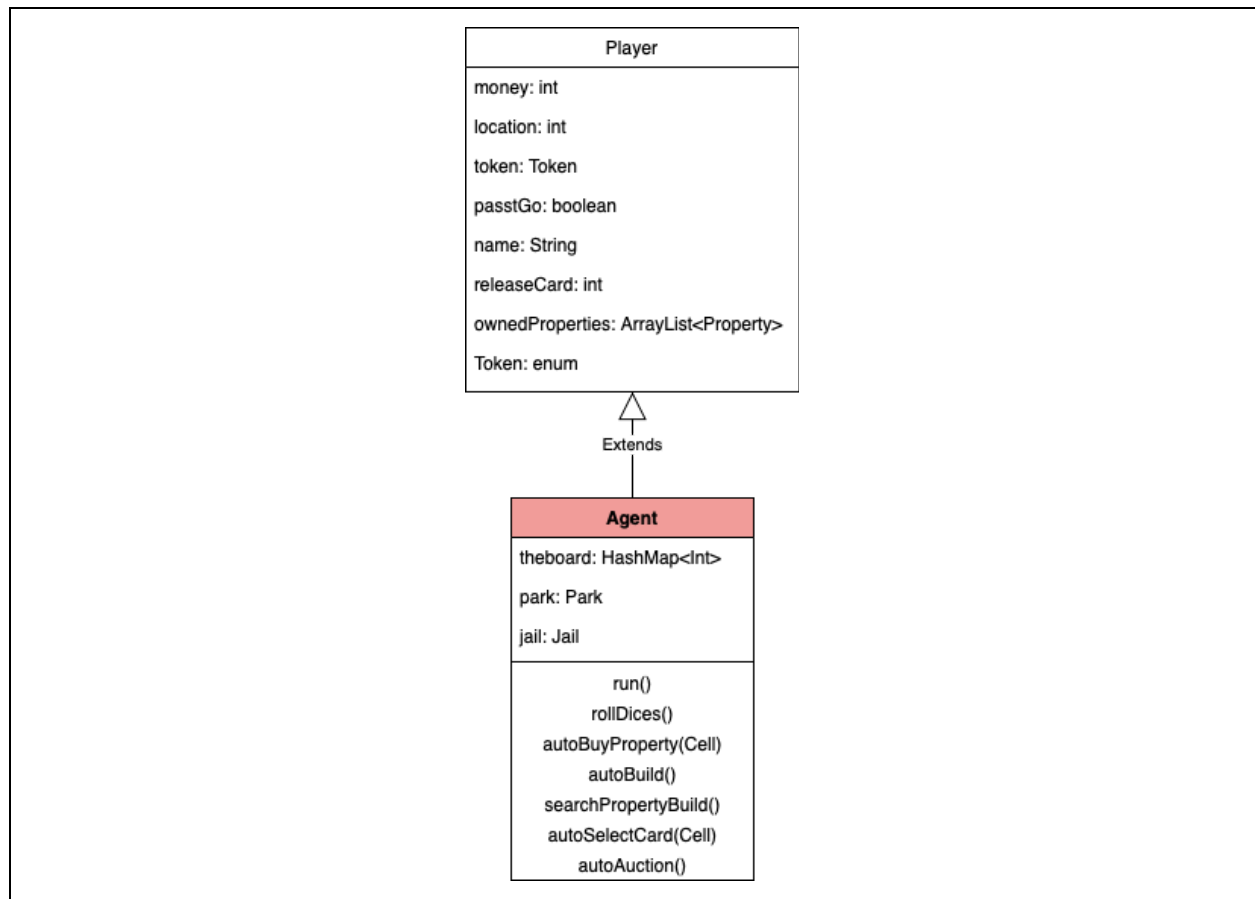
A game player agent may not opt to retire from the game. A game player only leaves the game when they are bankrupt.

4) Requirement analysis

	Functional	Non-Functional
TC1: Game Agent	TC1-F1: The game agent shall takes the role of one or more players TC1-F2: The game agent shall act like a human player: <ul style="list-style-type: none">- throws the dice- moves its token and acts according to the space they landed on (take a pot luck or opportunity card, goes to jail, buys property, takes place in property auction, etc.) TC1-F3: The game agent shall stick to the rules(e.g. Go to jail)	TC1-NF1: The application shall be capable of replacing all six players of the game and play without a human player TC1-NF2: Human players shall not be able to manipulate the game agent TC1-NF3: The game agent should be implemented in a way that its performance can be improved throughout the development process

5) Design

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6) Test plan and evidence of testing

Testing of game agent is done in Sprint 8

7) Summary of sprint

Status of Task Cards:

The following game agent features are implemented:

- Buy property
- Buy house and hotels
- Roll dice
- Free Parking
- Pay rent
- Mortgage - is a part feature of "pay rent"

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Other issues:

We have still a merging conflicts on the master branch which we need to solve first. → **solved**

The Agent Class still needs to be tested.