IST 311 Agile Team Project

SP18 IST 311

Instrutctor Professor Rimland.

26 April, 2018

Group 10

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Team Project: Snake Game (Java-based)
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Project Start Date: April 21, 2018
Project End Date: April 26, 2018

Summary:

We wanted to create a snake App. And we came up the idea that a snake app contains three main parts. A board(like a chess board), snake and a controller (4 points control, up, down, left and right). The program can calculate when the snake 'eat' food which was randomly populated on 100*100 size grid and adds to its length. The game ends when the snake hits the edges of the grid board. The goal of our first iteration is to create a static snake sitting on a board and in the 2nd iteration the snake can move around the board.

Brainstorming notes:

What application will you create: Snake Game

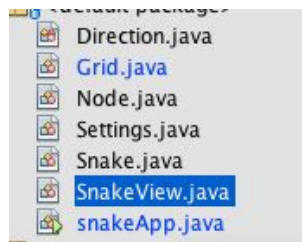What languauge will you use: Java

What skills/resources will that entail: Java, MVC, Graphics API

What skills enable your teams to accomplish this: How to use Github, write backlog, MVC, Graphics API

How will you collaborate: Google Docs, GitHub, Jira

Deliveriables

1. Iteration 1 Product
   a.
   b. Class: direction, grid, node, setting snake, snake view and snake app were implemented successfully in the first iteration.
2. Iteration 2 Product
   a. Added Controller class.
3. Project Documentation (including backlog and retrospective for each iteration)

Story Report

Iteration 0

Sprint 0 - Backlog

Issue ID	Summary	Issue Type	Priority	Status	Story Points	Assignee
1	Decide which programming language we are using	Story	Highest	Done	0	Jingyi
2	Decide which framework we are using	Story	High	Done	0	Tiancheng
3	Decide which data structure we are using	Epic	High	Put in backlog	5	Cheng
4	Setting up GitHub Repo	Story	High	Done	0	Zeying

Sprint 0 - Retrospective

Issue ID	Summary	Issue Type	Priority	Status	Story Points	Assignee
3	Decide which data structure we are using	Epic	High	Move to next interation	7	Cheng

Iteration 1

Sprint 1 Dashboard

Issue ID	Summary	Issue Type	Priority	Status	Story Points	Assignee
5	Create Snake and Grid Class	Story	High	Done	1	Cheng
6	Determine the relationship between the snake and the gird	Story	High	Done	3	Tiancheng
7	Controlling snake direcions: UP, RIGHT, DOWN, LEFT	Story	High	Done	5	Jingyi
3	Decide which data structure	Epic	Highest	Done	7	Cheng
11	May need to define direction in separate class	Story	Medium	Done	3	Zeying
12	Design the Snake class with simple methods	Story	Medium	Done	5	Jingyi
13	Design the Grid class with simple methods	Story	Medium	Done	5	Cheng
15	In-depth	Story	High	Done	7	Zeying

Iteration 1

	design each method in Grid class					
17	Detect the snake status on grid	Story	Medium	Done	5	Zeying
18	Initialize Snake on the Grid	Story	Medium	Done	3	Cheng
19	Create food randomly on the grid	Story	Medium	Done	3	Jingyi
20	Determine if each each movement is successful	Epic	Highest	Moved to retrospective	7	Tiancheng
21	JFrame design	Story	Medium	Done	3	Jingyi
22	Create GUI with using Swing	Story	Medium	Done	5	Cheng
23	Draw Snake and Grid with using Graphics API	Story	Medium	Done	5	Zeying
24	Integrate JPanel with JFrame	Story	Medium	Done	3	Tiancheng

Sprint 1 - Retrospective

Issue ID	Summary	Issue Type	Priority	Status	Story Points	Assignee
20	Determine if each each movement is successful	Epic	High	Move to iteration 2	7	Tiancheng

Iteration 2

Sprint 2 - Backlog

Issue ID	Summary	Issue Type	Priority	Status	Story Points	Assignee
20	Determine if each each movement is successful	Epic	High	Done	7	Tiancheng
25	Accept event from keyboard	Story	Medium	Done	3	Zeying
26	Process key press function	Story	Medium	Done	3	Zeying
27	Make snake movable instead static	Story	Medium	Done	5	Zeying
28	Implement Game Thread	Story	Medium	Done	3	Zeying
29	Run Game Thread	Story	Medium	Done	2-3	Zeying
33	Enforcing Test Driven Development	Story	High	In Progress	0	Tiancheng
34	Add background image to the game in SnakeView	Story	Low	Done	3	Jingyi Guan

Sprint 2 - Retrospective

Issue ID	Summary	Issue Type	Priority	Status	Story Points	Assignee
35	Calculate ranking point	Story	Low	Move to iteration 3	5	N/A
36	Adjust difficulty (Moving speed)	Story	Low	Move to iteration 3	5	N/A
37	Beautify GUI	Story	Low	Move to iteration 3	5	N/A