Individual Contribution

I developed the MVC (Model View Controller) framework for the project. This version of MVC framework is based on Java and Apple's Swift. I selectively developed some features that facilitate the development of the game, including Event Push and Notification system. This framework basically allows generated events to be passed to interested audiences for response. E.g. Instead of directly call some specific methods when game started, this system allows "GameStarted Event" to be passed to all interested audiences like Player or "LevelView", so the responses would be highly adaptive.

I implemented the Animation Framework, which allows images to be moved, or resized with specified Easing functions (e.g. generate linear/exponential changes relative to time). This framework is generally based on the Javascript. I chose the same naming so my group members were familiar with the usage.

I designed and implemented a Game Development Tool with GUI to help my group to generate routes for spaceships. I updated the tool 2 times according to their feedback, and the generated data was very sound.

I wrote most of the code related to Graphic User Interfaces. The button: user can click and will show animations when mouse is over it or when it is clicked. The Game View: contains all different scenes including welcome scene, game play scene, and game over scene. The view for player will response to the keyboard events, and move or shoot accordingly. The Level View: defines the movement and pattern of the enemy and their bullets.

When the game is finished, I also helped to discover, discuss and solve some bugs.

Apart from producing code, I also helped my group members to arrange meetings and make plans.