COMP3069 Coursework 2 Proposal

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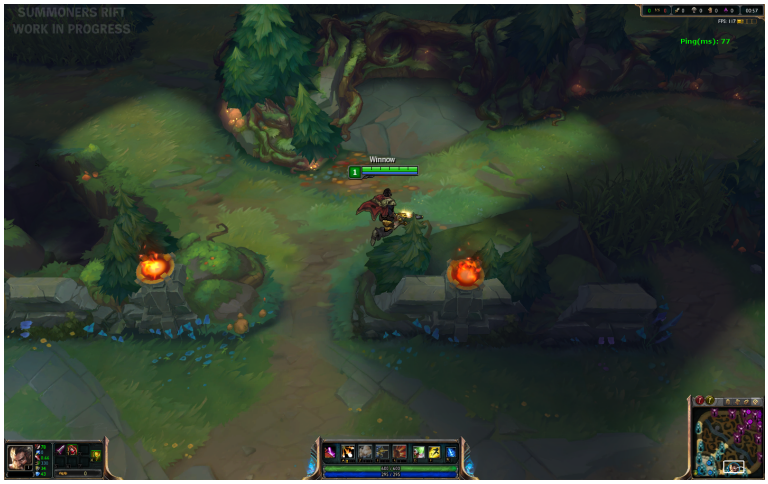
Abstract

I myself was a fan of League of Legends, a Multiplayer Online Battle Arena(MOBA) game, with 8 years of experience. Players control their correspond champion to move, cast spells and dodge other's spells, destroy enemy's turrets to win the game.

In this coursework, I would like to make a **simplified MOBA-like 3D scene**. Take the below screenshot for illustration, you will be able to control a champion to move around and explore a simplified map through right click. Some interesting spells and animations may also be made for the champion.



A real-game screenshot of League of Legends

Scene

Since the whole Summoners' Rift is quite large, I would choose a small region of Summoners' Rift to make.

Animations may be added to the trees, flowers and grasses. They may shake with the wind in a certain rhythm.

Champion

A champion model should be built. Since we are using OpenGL instead of modelling softwares, complicated model is not very realistic. Refering to the champion models of League of Legends, I may make a much simpler one.

A champion model example in League of Legends, Camille

The champion may have a standing animation and a move animation to show, when it is in corresponding states.

Automatic Pathfinding

In League of Legends, there are **walls** that cannot be directly crossed over. Since the champion may move to a certain position, some algorithms like A-star algorithm may be developed to calculate how to move to that position.

Spell

Each champion owns 5 spells in League of Legends. In this simplified coursework, if the time allows, I may develop some animations for the user to make the champion laugh, dance or get angry, or even move/dash across the walls. Press Q, W, E, R or D, F to use these spells.

Sound

If the time allows, sound may be added to this coursework to promote the immersion of this program.

Contigency Plan

Due to the heavy work of this coursework and other modules, it is possible that the mentioned features cannot be completely finished. In that case, I may choose to reduce the complicated modelling to pixel-like objects to make it easier, or to remove some unnecessary features.