Version: 1.1
Date: 31/3-15
Author: Kevin Hoogendijk, Alexander Håkansson, Alexander Karlsson, Maxim Goretskyy
This version overrides all previous versions.

Requirements and Analysis Document

Legend of Chalmers

Table of content

1. Introduction

This section gives a brief overview of the project

1.1 Purpose of application

The application is for pure entertainment and is targeted at students at Chalmers University of Technology.

1.2 General characteristics of application

Legend of Chalmers is a game where you walk around campus and discover different minigames where you earn hec (higher education credits). The game is a standalone desktop application for Windows, Linux and Mac. It is a top-down styled 2D game where the player walks around in a world and encounters mini-games as s/he explores the world. The mini-games is an interpretation of the different problems students stumble upon

during their time at Chalmers. The game is a single-player game but will be created in a way that enables for a future multi-player implementation. The game is real-time and grid based. The goal of the game is for the player to earn enough credits to get their exam (300 hec).

1.3 Scope of application

A 2D game where you walk around Chalmers campus Johanneberg and do mini-games to earn hec. You will not be able to walk inside building or outside of campus. There will only be about 2 minigames implemented but it will be easy to add new ones.

1.4 Objectives and success criteria of the project

The objective is to create a world map that will simulate Chalmer's campus and to be able to walk freely and participate in mini-games. The project will be considered done when it is possible for the player to walk around at least some part of the campus and collect hec. There should be at least 2 minigames.

1.5 Definitions, acronyms and abbreviations

- LoC = Legend of Chalmers
- hec = Higher education credits
- FPS = Frames per second
- NPC = Non-playable character

2. Requirements

2.1 Functional requirements

Create a list of high level functions here (from the use cases).

2.2 Non-functional requirements

Possible NA (not applicable).

2.2.1 Usability

It should be easy to start and have intuitive controls.

2.2.2 Reliability

N/A

2.2.3 Performance

The game should run without any noticeable lag - should run with over 30 FPS at all times.

2.2.4 Supportability

The game should be able to run on Mac, Windows and Linux.

2.2.5 Implementation

2.2.6 Packaging and installation

N/A

2.2.7 Legal

2.3 Application models

2.3.1 Use case model

See appendix for use case document.

2.3.2 Use cases priority

1. Move player
2. Pick up beverage
3. Dialog with NPC
4. Save game

2.3.3 Domain model

See appendix for the domain model.

2.3.4 User interface

The screen resolution is going to be 1024x576, that is 32 tiles in width, and 18 tiles in height giving a 16:9 aspect ratio. There will be a menu where the player can navigate and perform several actions. Menu is hidden by default. Dialogs with NPCs are shown in the bottom of the screen and they are only shown when there is a conversation going on between the player and a NPC. The points are always shown in the top left corner. See appendix for mockup of the user interface.

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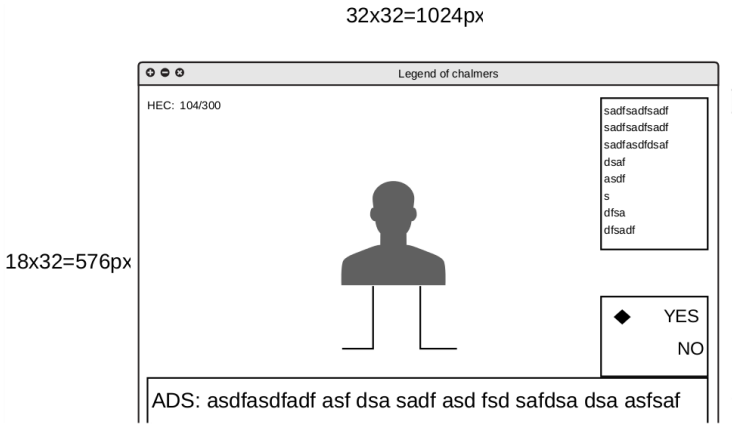
Appendix

1. Use cases

[Link to drive folder with use cases]

2. GUI

Mockup of user interface.



3. Domain model

[Link to domain model]