Goose Scaring Game

Mengyao Xu

September 2016

Dissertation submitted in partial fulfilment for the degree of
Master of Science in Software Engineering

Computing Science and Mathematics
University of Stirling

Abstract

Problem:

The aim of the project is to produce an application for a game-based experimentation, which may help a PHD student from Biological and Environmental Science, Chris R J Pollard, collect data. The data would be collected from conservation conflict between government and farmers without internet access. The application would offer several types of round-based games for the users to act as different parties of conflicts. The choices made by the people in the gamification and the results of the gamification would be collected.

Objectives:

The ideal situation is to make a client-server application. The client side, implemented with an android app on tablets, provides game interfaces for the users to make decisions. All the decisions would be collected on the server side, which means the application on the laptop. However, this situation requires high technical supports and long time to finish. This report represents a simulation to play the game without internet access on an application on a laptop.

Methodology:

Java was used to build the simulation mentioned above. Java Swing is the library to create the game interfaces.

Achievements:

The ideal situation is attempted but failed, but the problems met would be mentioned in the report. The simulation is successfully implemented. Game manager can make settings on the setting interface. And users can make decisions on game interface. It also simulates the process of passing information. All the details of the games can be saved into files.