

High-Level Architectural Design

21 Questions

Gabriel Lopez de Leon - lopezdg - 1310514

Curtis Milo - milocj - 1305877

Max Moore - moorem8 - 1320009

Alex Rahman - rahmaa25 - 1305735

Connor Sheehan - sheehacg - 1330964

March 7th, 2016

Contents

1	Introduction	2
1.1	Purpose	2
1.2	System Description	2
1.3	Overview	2
2	Use Case Diagram	2
3	Analysis Class Diagram	5
4	Architectural Design	5
4.1	System Architecture	5
4.2	Subsystems	5
5	Class Responsibility Collaboration (CRC) Cards	6
A	Division of Labour	7

1 Introduction

This section should provide an brief overview of the entire document.

1.1 Purpose

- a) Delineate the purpose of the document
- b) Specify the intended audience for the document

1.2 System Description

- a) Give a brief description of the system. This could be a paragraph or two to give some context to this document.

1.3 Overview

This document will outline the design of the *21 Questions* application from an architectural perspective. The document will begin from a use case outlook, outlining application functionality from a practical point of view and taking different actors and stakeholders into consideration. Next, an analysis class diagram and associated interpretation details is outlined, to specify application behaviours and resources in a modularized form. Following this section is a detailed architectural design as well as a set of class responsibility collaboration cards. These sections specify modules in greater detail, including interfaces to be implemented in the future. The order of these sections reflects a systematic progression from requirements to a more easily constructed application.

2 Use Case Diagram

This section should provide a use case diagram for your application.

- a) User wants to enter new search.

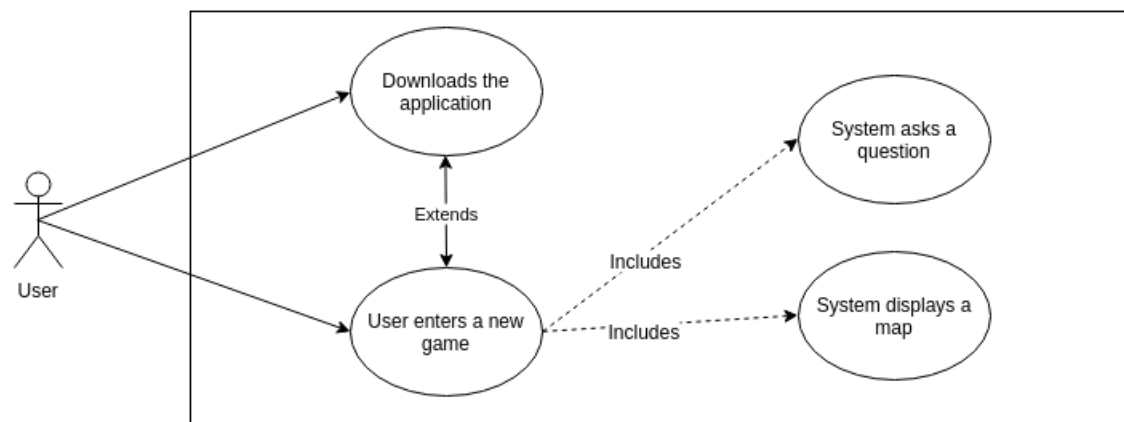


Figure 1: BE1

- b) An unlisted establishment requests to be included in the application.

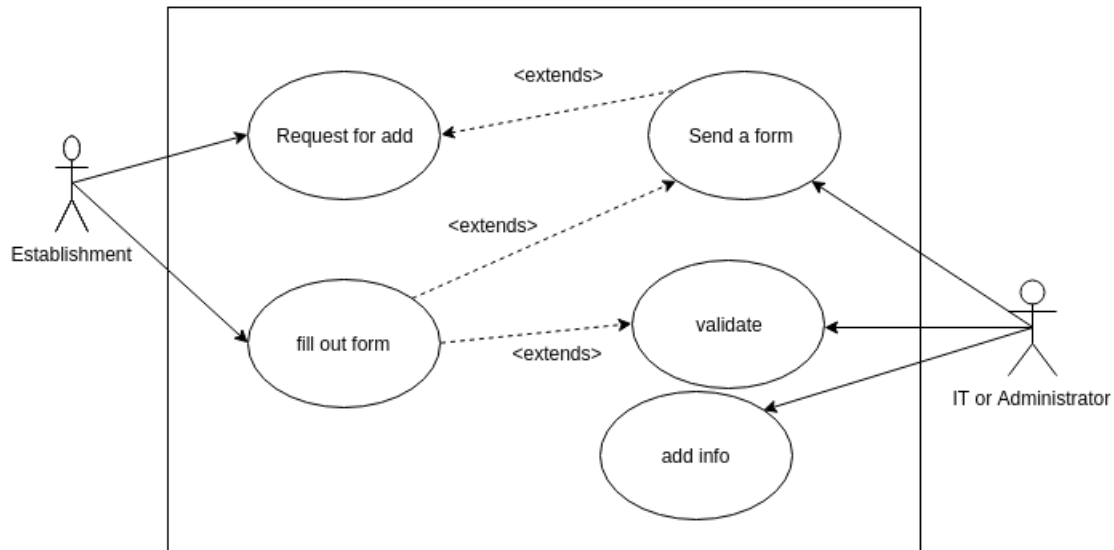


Figure 2: BE2

c) Updates or maintenance of the application is required.

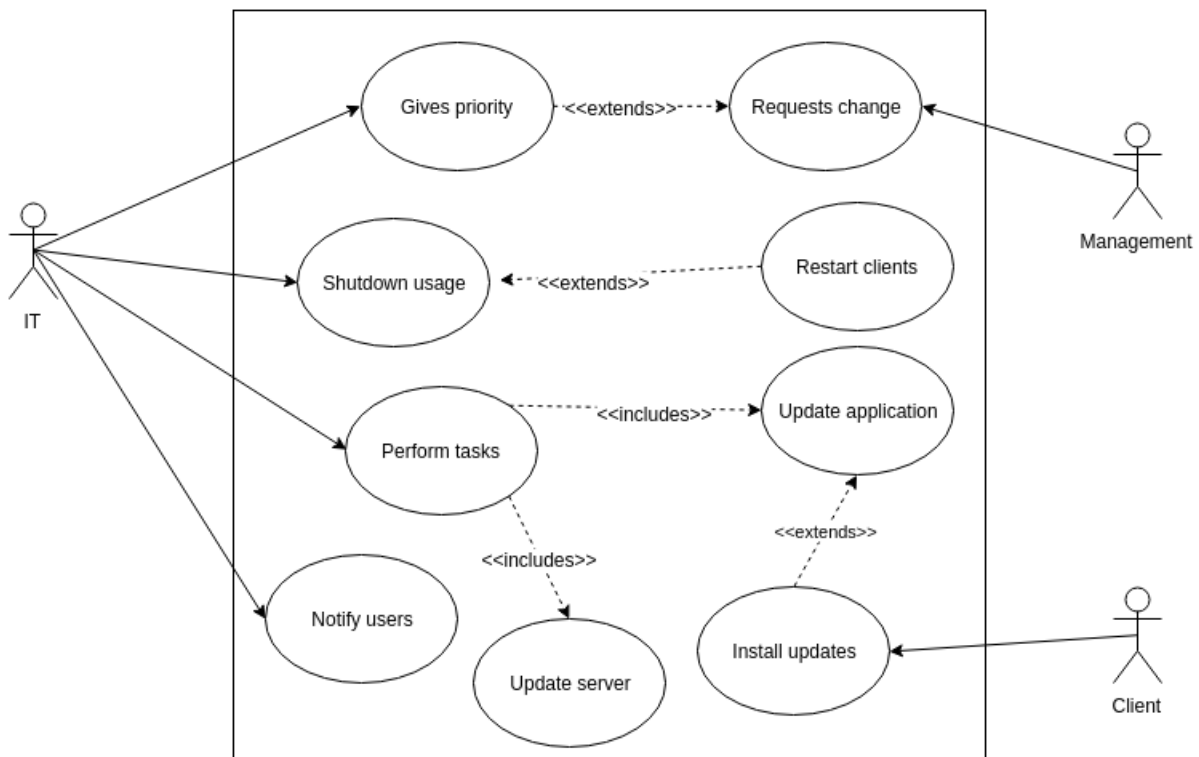


Figure 3: BE3

d) Management requests implementation or change of experts.

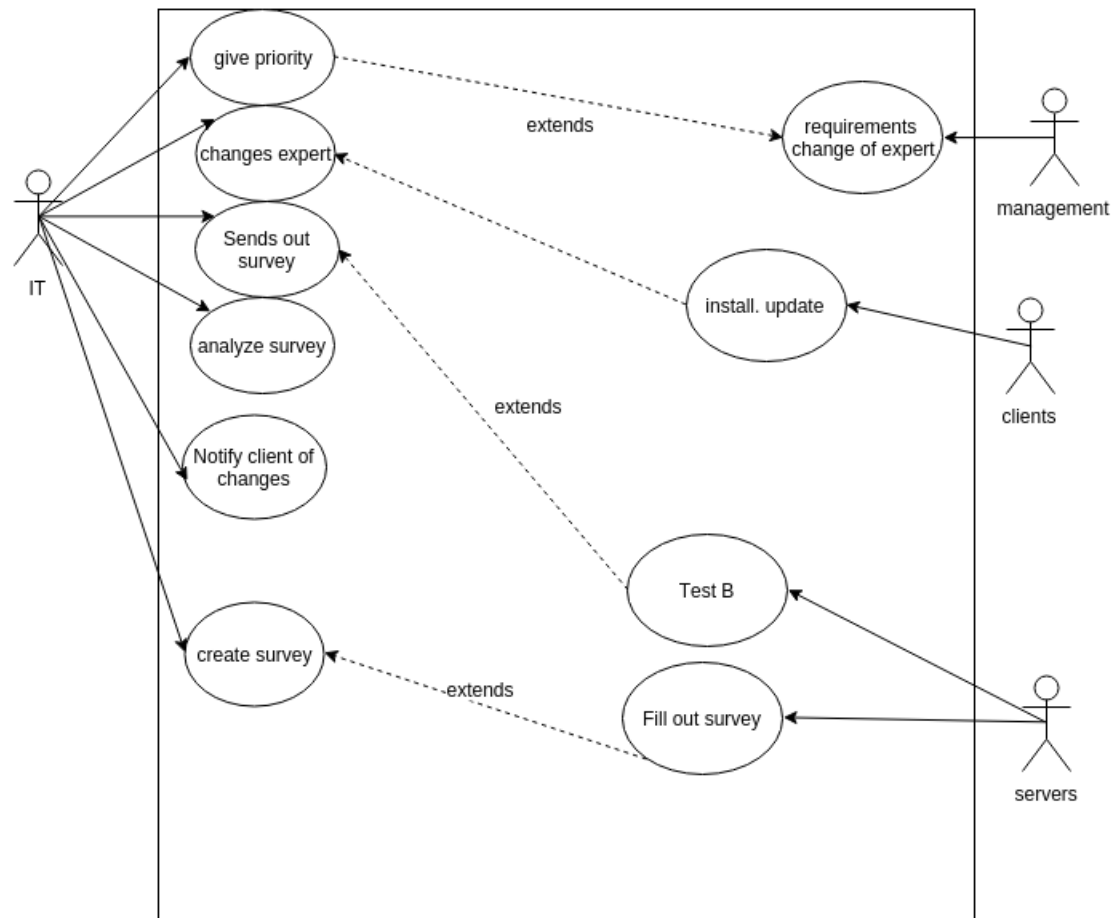


Figure 4: BE4

e) User flags an incorrect or inappropriate search or result.

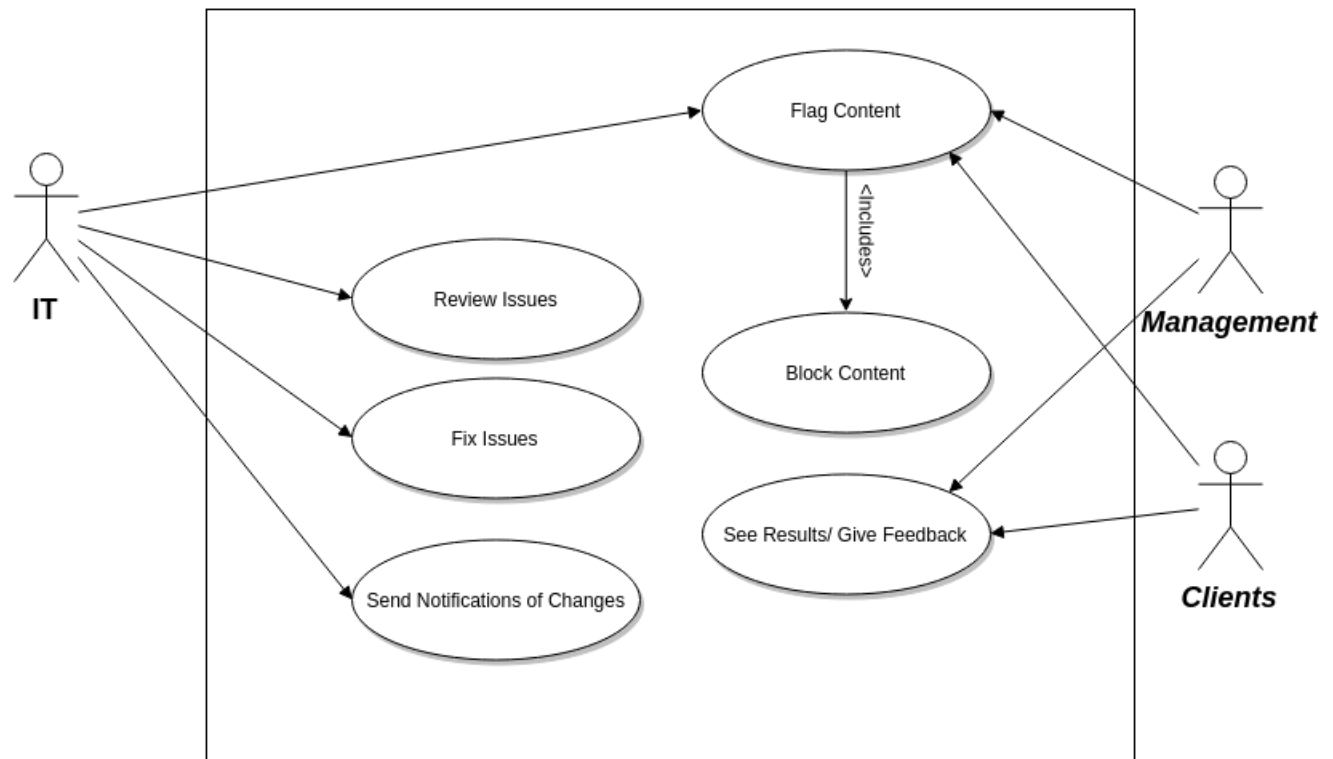


Figure 5: BE5

3 Analysis Class Diagram

This section should provide an analysis class diagram for your application.

4 Architectural Design

This section should provide an overview of the overall architectural design of your application. Your overall architecture should show the division of the system into subsystems with high cohesion and low coupling.

4.1 System Architecture

The diagram is designed to have minimal communications between the 3 separated units. The system is design is a client server model where the client side will be a in a model view controller. The system will have two controllers, one for handling the pages of the system and the other for controlling which expert can ask questions. The information of what questions to ask be communicated from the server and stored in the clients side in an ADT. The client server style of architecture gives a very useful way of ensuring that all users will have the same information available to them without having a large amount of mobile updates. The model view controller is useful for being able to organize the structure of the clients side.

4.2 Subsystems

- Provide a brief description of each subsystem. Be sure to document its purpose and relationship to other subsystems.

5 Class Responsibility Collaboration (CRC) Cards

This section should contain all of your CRC cards.

- Provide a CRC Card for each identified class
- Please use the format outlined in tutorial, i.e.,

Class Name:	
Responsibility:	Collaborators:

A Division of Labour

Team Member	Contributions
Gabriel Lopez de Leon	
Maxwell Moore	
Curtis Milo	
Alexandra Rahman	
Connor Sheehan	Created use case diagram for BE3. Added overview section. Added styling.

Table 1: Division of Labour

Gabriel Lopez de Leon

Date

Curtis Milo

Date

Max Moore

Date

Alex Rahman

Date

Connor Sheehan

Date

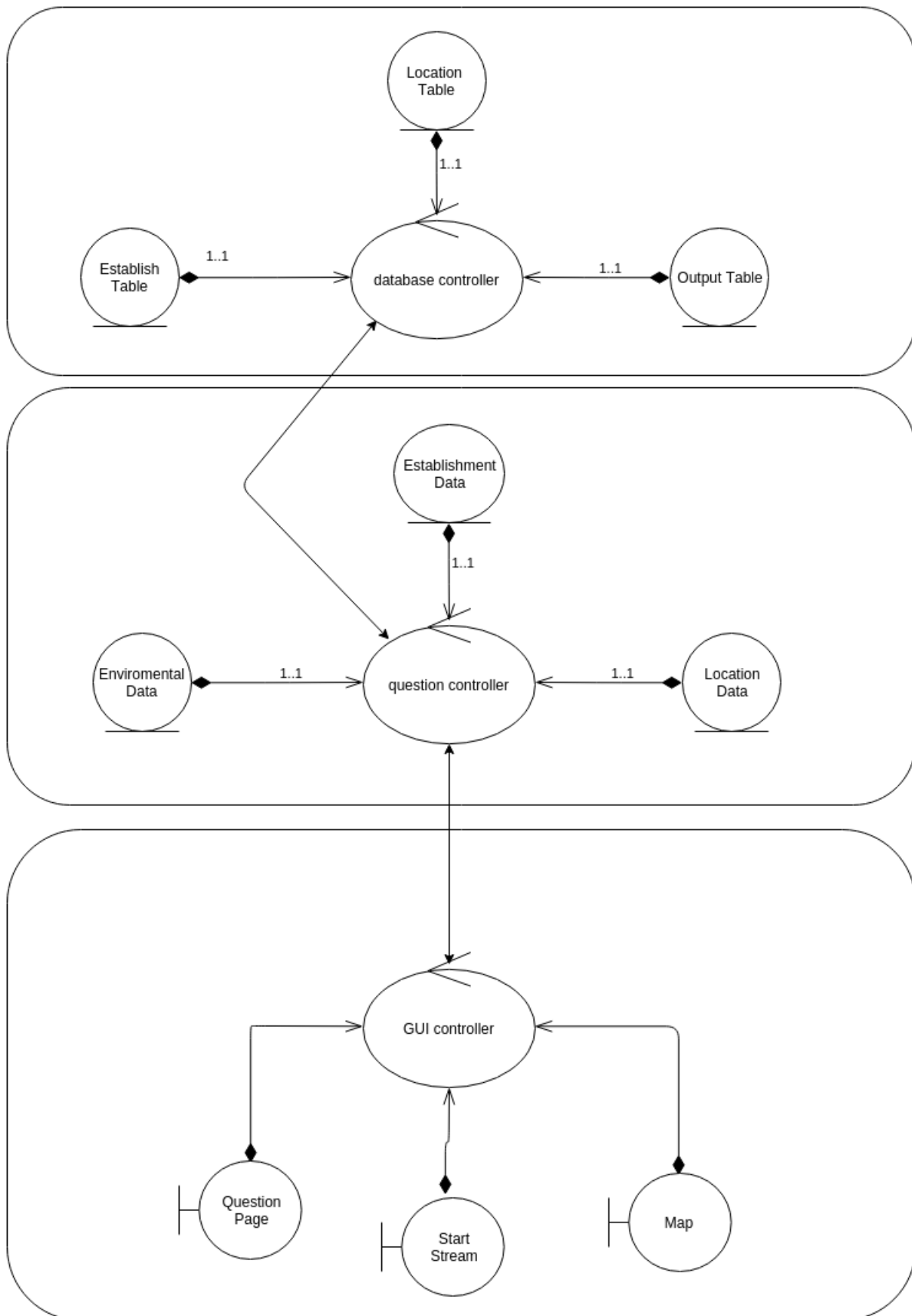


Figure 6: The analysis class diagram