

# Deliverable #2 Template

SE 3A04: Software Design II – Large System Design

## 1 Introduction

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

### 1.1 Purpose

- a) The purpose of this document is to present the high-level architectural design of the IdentiFisher Android application introduced in the Software Specification Requirements document. This will be accomplished using various diagrams and textual descriptions.
- b) The intended audience for this document includes any stakeholders involved in the project or interested in the application. This document is especially intended for any person on the project development team who will have a role in the design and implementation of the application and may also include investors, managers, or future users of the application who wish to see the high-level design of the application.

### 1.2 System Description

The system described in this document is called IdentiFisher, an Android application intended to be used by beginner to experienced fishers. IdentiFisher accepts user input about a fish that they have caught and attempts to identify the type based on specific details about the physical appearance and geolocation of the fish. The application will interface with an online mapping system in order to obtain geolocal information and will maintain a data collection of fish caught in specific locations in order to generate catch-rate and other statistics that will be available to users of the application upon request.

### 1.3 Overview

The beginning of this document has introduced the purpose of the document and has given a brief outline of IdentiFisher, the system being designed. The subsequent sections will go into detail about the uses and high-level design of the application. First of all, a Use Case Diagram will be presented with a description of the uses of the application. Next, an Analysis Class Diagram will be included in order to show the general organization of the application's classes. The fourth section will provide an overview of the architectural design of the application, including a Structural Architecture Diagram as well as a description of any subsystems. The fifth section will be comprised of Class Responsibility Collaboration (CRC) Cards that will outline the responsibilities and collaborators for each class identified. Finally, a Division of Labour section is included in this document in order to identify each author along with the portion so the document that they have completed.

## 2 Use Case Diagram

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

- a) Each use case appearing in the diagram should be accompanied by a text description.

### 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

- a) Identify and explain the overall architecture of your system
- b) Be sure to clearly state the name of the architecture
- c) Provide the reasoning and justification of the choice
- d) Provide a structural architecture diagram showing the relationship among the subsystems (if appropriate)

#### 4.2 Subsystems

- a) 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.

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

Class Name:	
Responsibility:	Collaborators:

### A Division of Labour

Name	Labour	Signature
Shani	Introduction I	
Chris	Class Responsibility Charts	
James	Architecture Design	
Ocean	Analysis Class Diagram	
Tian	Use Case Diagram	

## IMPORTANT NOTES

- Please document any non-standard notations that you may have used
  - *Rule of Thumb*: if you feel there is any doubt surrounding the meaning of your notations, document them
- Some diagrams may be difficult to fit into one page
  - It is OK if the text is small but please ensure that it is readable when printed
  - If you need to break a diagram onto multiple pages, please adopt a system of doing so and thoroughly explain how it can be reconnected from one page to the next; if you are unsure about this, please ask about it
- Please submit the latest version of Deliverable 1 with Deliverable 2
  - It does not have to be a freshly printed version; the latest marked version is OK
- If you do NOT have a Division of Labour sheet, your deliverable will NOT be marked