Software Requirements Specification (SRS)

My Intent Demo App

1. Introduction

1.1 Purpose

The purpose of this document is to define the functional and non-functional requirements for the "My Intent Demo" Android application. It illustrates the usage of Explicit and Implicit Intents using a simple, real-world example.

1.2 Scope

The application will contain a main activity that navigates:

- To a Profile screen using Explicit Intent
- To a web browser and phone dialer using Implicit Intents

This is intended for use by students, learners, or professionals to understand Android intent handling.

2. Overall Description

2.1 Product Perspective

This is a stand-alone Android mobile application, not requiring internet connectivity except when opening a website via a browser.

2.2 Product Functions

- Display three buttons on the home screen:
 - Go to Profile (explicit intent)
 - Open Website (implicit intent to browser)
 - Call Support (implicit intent to dialer)
- On clicking each button, perform the corresponding navigation or action.

2.3 User Classes and Characteristics

- Primary Users: Android developers, engineering students, mobile app testers.
- Characteristics: Basic familiarity with Android and Java/Kotlin programming.

2.4 Operating Environment

- Android OS 6.0 (API level 23) or higher
- Java 8 or Kotlin-compatible runtime

- Android Studio 4.0+ for development

3. Functional Requirements

Functional Requirements Table

FR1: The app shall display three buttons on the MainActivity

FR2: Clicking 'Go to Profile' shall launch ProfileActivity using Explicit Intent

FR3: Clicking 'Open Website' shall launch a browser with URL 'https://www.google.com' using Implicit Intent

FR4: Clicking 'Call Support' shall open the dialer with pre-filled number '+91 9876543210' using Implicit Intent

FR5: ProfileActivity shall display a welcome message "Welcome to Profile Page"

4. Non-Functional Requirements

Non-Functional Requirements Table

NFR1: The application should launch within 2 seconds

NFR2: The UI should follow basic material design principles

NFR3: The application should work offline for intents that do not require network

NFR4: Buttons should be responsive with at least 48dp padding

NFR5: Code must follow standard Android development practices

5. System Models

5.1 Use Case Diagram (Summary)

- Actor: User

- Use Cases:

- Navigate to Profile
- Open Website
- Call Support

6. Assumptions and Dependencies

- The user has an internet connection to open the browser intent.
- The device supports ACTION_DIAL intent.
- The target activities are declared in AndroidManifest.xml.

7. Appendix

7.1 Glossary

- Explicit Intent: Intent specifying the target component class.

- Implicit Intent: Intent requesting an action without specifying the component.
- Activity: A screen in Android.