Software Requirements Specification

TaxiTap by Git It Done

# Introduction

TaxiTap is a mobile platform designed to revolutionize South Africa’s minibus taxi industry by digitizing route information, eliminating the need for constant hooting, and creating a semi-structured booking system while preserving the flexibility that makes taxis an essential mode of transport. The system connects passengers and taxi operators through a location-aware mobile application that facilitates taxi requests, communicates passenger locations, manages payments, and provides real-time vehicle tracking – all without fundamentally changing the existing system's multi-passenger, flexible route nature.

# User Characteristics

The users of the Taxi Tap system are expected to fit into the following groups:

1. User: (who is user)
   1. Passenger
   2. Driver

# User Stories

Break into the different subsystems, ex. User Management Subsystem.

# Service Contracts

# Domain Model

# Functional Requirements

List all functional requirements and the sub requirements.

1. User Management System
2. Feedback System
3. Passenger System
   1. Ride requesting System
4. Driver System
5. Routes and Navigation System
6. Notifications and Alerts System

# Use Case Diagrams

Use case diagrams of different parts of the system.

# Technology Requirements

## Frontend

## Backend

## User Authentication and Management

## Testing Frameworks

## CI/CD

## Version Control

## Documentation

# Architectural Requirements

## Quality Requirements

Quality requirements determine the overall quality of TaxiTap by specifying criteria that define how well the system performs and behaves.

1. Security
2. Usability
3. Scalability
4. Performance?
5. Reliability?
6. Confidentiality?
7. Accessibility
8. Maintainability?

## Architectural Patterns

Architectural patterns are compositions of architectural elements which allow a system to effectively meet its quality requirements.

## Design Patterns

Why do we use them and where in the class diagram we use them.

## Constraints

Constraints clients laid out.