Software Requirements for Smart Tourism GSE

Version 0.1
November 8, 2023

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Glossaries

MSME

is the abbreviation of the term "Micro Small Medium Enterprises". 3

1 Introduction

In the context of Malang, East Java, a region where a quarter of the tourism is concentrated, there's a substantial opportunity to impact the local economy positively through technological advancements. This is particularly relevant considering the tourism sector's backbone is formed by Micro Small Medium Enterprises (MSME), with micro enterprises, those with assets under $317, accounting for a staggering 98% of all businesses in Indonesia.

The current challenge faced by these vital tourism stakeholders in Malang is the absence of a centralized information system. This gap not only hinders their operational efficiency but also leaves a void in data collection tools essential for government and policymakers to evaluate tourist destinations' quality and visitor experiences.

Additionally, from a tourist perspective, there is a noticeable deficit in accessible information regarding the plethora of tourist attractions Malang offers, such as its culinary delights, scenic spots, and rich cultural heritage.

This document outlines the high-level software requirements for this proposed system, known as the XXXXX system. In some areas, these requirements are incomplete and more detailed requirements must be derived after consultation with Malang government agents.

This document will outline the software requirements aimed at bridging these gaps. It will propose a solution designed to serve the dual purpose of empowering local MSME with a platform to manage and disseminate tourism-related data effectively, and enhancing the tourists' experience by providing them with comprehensive, up-to-date information about Malang's tourist attractions. Through this initiative, we aim to foster growth in the tourism sector of East Java, bolstering the local economy and enriching the tourist experience.

1.1 System overview

The key features of the system are:

1. *Tourist planning system*
2. *Virtual tourist assistant*
3. *Feedback data collection*

The overall design of the system has to take into account both safety and privacy concerns.

1. The safety implications comes from the fact that

1.2 System users

There are 4 types of user that make use of XXXX system:

1. *System administrators*
2. *Tourist* Tourist interact directly with the system, including using the tourism features and giving feedback to the system.
3. *Government* Government do not interact with the system directly. Instead, the government make use of reports including tourist information, preferences, and feedback data. The reports are generated automatically by the system and do not contain personal information regarding specific tourists. Government agents do not have access to the tourism features of the system or to individual tourist records.
4. *Local businesses*

1.3 System usability

1.4 Operational constraints

The following operational constraints shall apply to the XXXX system:

1. The XXXX system shall make use of the Firebase single sign-on authentication system. This system is an authentication system that requires a login and password to access the system features.

2 User requirements

2.1 Tourist requirements

2.2 Governmental requirements

2.3 Business management requirements

3 System requirements

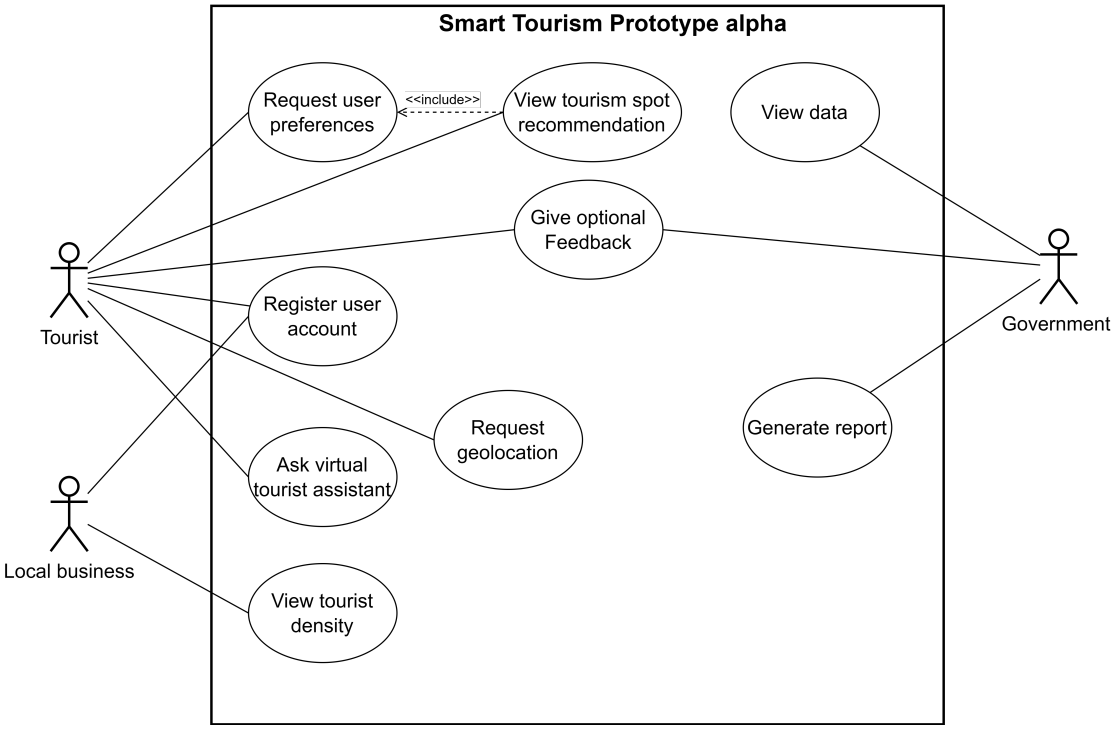

Figure 3.1: Use case diagram of XXXX system

3.1 Fuctional requirements

3.2 Non-functional requirements

3.3 Constraints

4 Security and privacy requirements

4.1 Security requirements

4.2 Privacy requirements