

Attraction Pass - Requirements Specification

Author(s)

- Kabir Maiga
- TBD

Contributor(s)

- TBD

1. Introduction

This Requirements Specification document outlines the necessary features, user requirements, and security measures for the Attraction Pass SSI application. The Attraction Pass application aims to streamline the management of the city-wide attraction pass program, enhance visitor experience, and encourage tourism by leveraging the Trust over IP (ToIP) governance stack.

2. Scope

The scope of this document is to define the requirements for the Attraction Pass SSI application, including functional and non-functional requirements, as well as the user roles and use cases associated with the application.

3. Stakeholders

The main stakeholders for the Attraction Pass SSI application include:

1. City administration
2. Participating attractions
3. Visitors
4. Application development team
5. Governance Stack Working Group within Trust Over IP

4. User Roles

1. Visitor: Purchases and uses the Attraction Pass to gain access to participating attractions.
2. Attraction Staff: Validates and manages Attraction Passes at participating attractions.
3. City Administration: Manages and oversees the Attraction Pass program and participating attractions.
4. Application Administrator: Manages the Attraction Pass SSI application, user accounts, and system settings.

5. Functional Requirements

5.1. User Account Management

1. Visitors should be able to create a user account using their email address or a social media account.
2. Visitors should be able to recover their account using their email address or associated social media account.
3. Application administrators should be able to manage user accounts, including account suspension or deletion.

5.2. Attraction Pass Purchase

1. Visitors should be able to browse participating attractions and pass options.
2. Visitors should be able to purchase an Attraction Pass for 1, 2, or 3 consecutive days.
3. Visitors should be able to pay for the Attraction Pass using various payment methods, such as credit/debit cards, digital wallets, or cryptocurrencies.
4. Visitors should receive a digital Attraction Pass in their user account upon successful purchase.

5.3. Attraction Pass Validation

1. Attraction staff should be able to validate Attraction Passes using a mobile device or a dedicated validation system.
2. The validation process should be secure and privacy-preserving, in accordance with the ToIP governance stack.
3. Visitors should be granted access to participating attractions upon successful validation.

5.4. Attraction Pass Management

1. Visitors should be able to view their Attraction Pass details, including the remaining validity period and participating attractions.
2. City administration should be able to manage participating attractions, including adding, modifying, or removing attractions from the program.
3. Application administrators should be able to manage Attraction Pass options, pricing, and availability.

6. Non-functional Requirements

6.1. Security

1. The application must adhere to the ToIP governance stack for secure and privacy-preserving digital identity management.
2. The application must use encryption for data storage and transmission.
3. The application must follow industry best practices for secure software development.

6.2. Usability

1. The application must have an intuitive and user-friendly interface for all user roles.
2. The application must be accessible on various devices, including desktop, mobile, and tablet.
3. The application must support multiple languages.

6.3. Performance

1. The application must be able to handle a high volume of concurrent users.
2. The application must be responsive, with minimal latency during user interactions.
3. The application must be scalable to accommodate future growth in users and participating attractions.

6.4. Integration

1. The application must integrate with existing city infrastructure, such as train stations, city halls, city info centers, and participating attractions.
2. The application must support integration with various payment gateways to enable a wide range of payment options.
3. The application must integrate with relevant APIs or data sources to retrieve up-to-date information on participating attractions.

6.5. Maintainability

1. The application must be built using modular components to facilitate future updates and improvements.
2. The application must follow industry best practices for code readability, documentation, and version control.
3. The application must include a monitoring and logging system to aid in troubleshooting and performance optimization.

7. Use Cases

7.1. Use Case 1: Visitor purchases an Attraction Pass

1. Preconditions: Visitor has a valid user account.
2. Main Flow: The visitor browses participating attractions, selects an Attraction Pass option, completes the payment process, and receives a digital Attraction Pass in their user account.
3. Postconditions: The visitor can use their Attraction Pass to gain access to participating attractions during the pass's validity period.

7.2. Use Case 2: Attraction staff validates an Attraction Pass

1. Preconditions: Visitor has a valid Attraction Pass and is at a participating attraction.
2. Main Flow: The attraction staff uses a mobile device or dedicated validation system to securely validate the visitor's Attraction Pass.
3. Postconditions: The visitor is granted access to the attraction if the validation is successful.

7.3. Use Case 3: City administration manages participating attractions

1. Preconditions: City administration has access to the Attraction Pass management system.
2. Main Flow: The city administration adds, modifies, or removes participating attractions in the Attraction Pass program.
3. Postconditions: The updated attraction information is reflected in the Attraction Pass application.

8. Conclusion

This Requirements Specification document provides a detailed overview of the functional and non-functional requirements for the Attraction Pass SSI application, as well as the user roles and use cases associated with the application. By adhering to these requirements and leveraging the Trust over IP governance stack, the Attraction Pass application will streamline the management of the city-wide attraction pass program, enhance visitor experience, and encourage tourism.