



East West University

Assignment 1

Semester: Spring-2022

Course Title: Information System Analysis and Design

Course Code: CSE347

Submitted by-

Name: Sheikh Sarafat Hossain

Id: 2022-3-60-109

Submitted to-

Md. Sabbir Hossain

Lecturer,

Department of Computer Science & Engineering

East West University

Date of Submission: 04-03-2025

Functional Requirements:

1. **User Accounts:** Visitors should be able to sign up and log in to an account.
2. **Ticket Booking:** Visitors can buy museum tickets through the app.
3. **Artwork Information:** The app should show details about artworks when visitors are near them or scan QR code.
4. **Museum Guide:** The app should help visitors find their way inside the museum.
5. **Save Favorites:** Visitors should be able to save artworks they like.
6. **Feedback System:** Visitors can share their opinions about the museum and artworks.
7. **Analytics:** The app should recommend artworks and routes based on visitor interests.
8. **Crowd Tracking:** Museum staff can see where visitors are inside the museum.
9. **Visitor Data:** The app should track visitor numbers and time spent at exhibits.
10. **Content Updates:** Administrators can update artwork details, pictures, and videos.
11. **Admin Ticket Booking:** Staff should be able to book tickets for visitors who need help.

Non-Functional Requirements:

1. **Scalability:** The app should work well even if many people use it.
2. **Security:** Visitor data and accounts should be protected.
3. **Fast Performance:** The app should work quickly without delays.
4. **Usability:** The app should be simple and easy to use.
5. **Availability:** The app should run on smartphones and tablets and it should be available 24/7 for bookings.
6. **Accuracy:** Navigation and artwork information should be precise and up to date. Visitor details and feedback should be saved properly.
7. **Maintainability:** The app should be simple to update and maintain.

Stakeholders:

1. **Visitors:** People using the app to explore and buy tickets.
2. **Museum Staff:** Workers who manage museum information and assist visitor.

3. **Museum Administrators** – Manage visitor analytics, crowd control, and update museum content.
4. **Developers**: The team who built and fixes the app.
5. **Security Experts**: People who keep visitors' data safe from data loss or hackers.
6. **IoT Service Providers** – Supply and configure IoT devices for tracking and navigation.