A logo for a university

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**Assignment 1**

**Semester:** Spring-2022

**Course Title:** Information System Analysis and Design

**Course Code:** CSE347

**Submitted by-**

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**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.