Final Assignment

Project Overview

1. Websites

- ○ Booking Frontend
  - ■ User-friendly interface to browse and book various services (e.g., hotel rooms, meeting rooms, and other bookable services).
  - ■ Display service options, descriptions, and pricing.
  - ■ Booking form with customizable options.
  - ■ User authentication (optional).

- ○ Admin Dashboard
  - ■ Manage bookings with search, filter, modify, and cancel options.
  - ■ Dashboard for administrative tasks.

2. Backend & Database

- ○ PostgreSQL Database
  - ■ **Users**: Stores user info (name, email, contact).
  - ■ **Bookings**: Details on service type, date, time, user info.
  - ■ **Services**: List of services with descriptions, pricing, and options.

- ○ Flask Integration
  Connects to the database for data retrieval and updates.

3. Optional Requirements
- ○ **Deployment**: Use hosting (Heroku, AWS, GCP) with optional custom domain.
- ○ **Security**: Implement SSL, input validation, and performance optimization.

Technical Stack

- ● **Frontend**: HTML, CSS, JavaScript, Bootstrap (or similar).
- ● **Backend**: Flask (Python).
- ● **Database**: PostgreSQL.
- ● **Deployment**: Hosting service (Heroku, AWS, GCP), optional domain.

Development Phases

1. Planning & Design
- Layout sketches and database schema design.

2. Development
- Set up a Flask environment.
- Develop frontend and backend functionality.
- PostgreSQL integration.

3. Testing
- Unit and integration tests.
- User experience tests.

4. Deployment (Optional)
- Deploy to hosting service.
- Set up a custom domain.

5. Documentation
- Setup guides, usage instructions, and code explanations.

Deliverables

- Source code for both websites.
- Database schema and setup scripts.
- Documentation and setup guides.
- Deployed URLs (if applicable).