

PROJECT PLAN — Online Gift Card Holding Service

1. Project Overview

The goal of this project is to build a **secure online gift card holding service** where users can store all their gift card details in one central place. Many people accumulate multiple physical or digital gift cards and often lose track of balances, expiry dates, or even the card numbers themselves. This application provides a simple, organized, and secure solution. Where users update their gift balances manually forcing them to remember to check their gift cards more often so none go to waste.

The platform will be designed using:

- **Node.js**
- **ExpressJS**
- **MongoDB / Mongoose**
- **EJS Templating**
- **Authentication + Authorization**
- **Full CRUD functionality**
- **Bootstrap styling**

Users will be required to create an account and log in to see, add, update, or delete their saved gift cards. All sensitive information will be protected through secured routes and database security best practices.

2. Project Goals

1. Provide a simple and user-friendly interface for storing multiple gift cards.
2. Ensure that card data is only accessible to authenticated and authorized users.

3. Allow users to:
 - Create (add new gift cards)
 - Read (view stored cards)
 - Update (edit card information)
 - Delete (remove cards they no longer need)
4. Achieve secure login, logout, and session handling.
5. Host the project online and organize the code in a clean, professional structure.

3. Target Users

- Individuals who want to organize and manage physical or digital gift cards.
- Shoppers who frequently use gift cards and want a single digital dashboard.
- People who want a secure place to store card numbers instead of writing them on paper or keeping them in unrelated notes apps.

4. Key Features

4.1 Gift Card Management (CRUD)

Users will be able to:

- Add a new gift card (store number, brand, balance, expiry date, notes).
- View all their gift cards in a professional online directory layout.
- Edit gift card details.
- Delete a gift card (with confirmation prompt).

4.2 Authentication + Authorization

- User registration and login.

- Password hashing using bcrypt and passport.
- Sessions or JWT authentication (session-based recommended with Express).
- Only logged-in users can view or modify their stored cards.
- Public visitors will only see the homepage.

4.3 User Interface

- Clean Bootstrap layout.
- Shared header and footer.
- A splash home page introducing the service.
- A dashboard showing the user's list of gift cards.

4.4 Database Structure (Draft)

Collections:

1. Users

- firstName
- lastName
- email
- passwordHash

2. GiftCards

- userId (reference to Users collection – ensures authorization)
- cardBrand
- cardNumber
- balance

- expiryDate
- notes
- dateCreated