First Report

Foundation Internship

Project Title: Smart Shop AI Assistant

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INTERNSHIP BASE REPORT - WEEK 1

I. Project Introduction

The internship project focuses on developing a website for selling authentic Apple products, including iPhone, MacBook, Mac Mini, and Mac Studio. The website offers features such as online payment support, integration of a chatbot for customer consultation, and order confirmation via email, aiming to enhance user experience and optimize the purchasing process.

II. Objectives and Key Features

1. **Product Pages**
   - Display product lists categorized by type.
   - Provide filters by price and product category.
   - Detailed product pages with comprehensive information.
2. **Cart and Payment**
   - Add/remove products to/from the cart.
   - Support payment via bank integration.
   - Send order confirmation via email.
3. **Chatbot Consultation**
   - Assist customers in selecting suitable products.
   - Respond to inquiries about features and pricing.
4. **Order Management**
   - Track order status.
   - Manage orders from the admin side.

III. Technologies Used

   - **Frontend**: CSS, Bootstrap.
   - **Backend**: PHP.
   - **Database**: MySQL.

- **Payment**: Integrated bank API.
- **Chatbot**: AI NLP.
- **Email Confirmation**: SMTP (Nodemailer).

IV. Development Plan

1. **Phase 1: Analysis and Interface Design**
   - Define detailed functionalities.
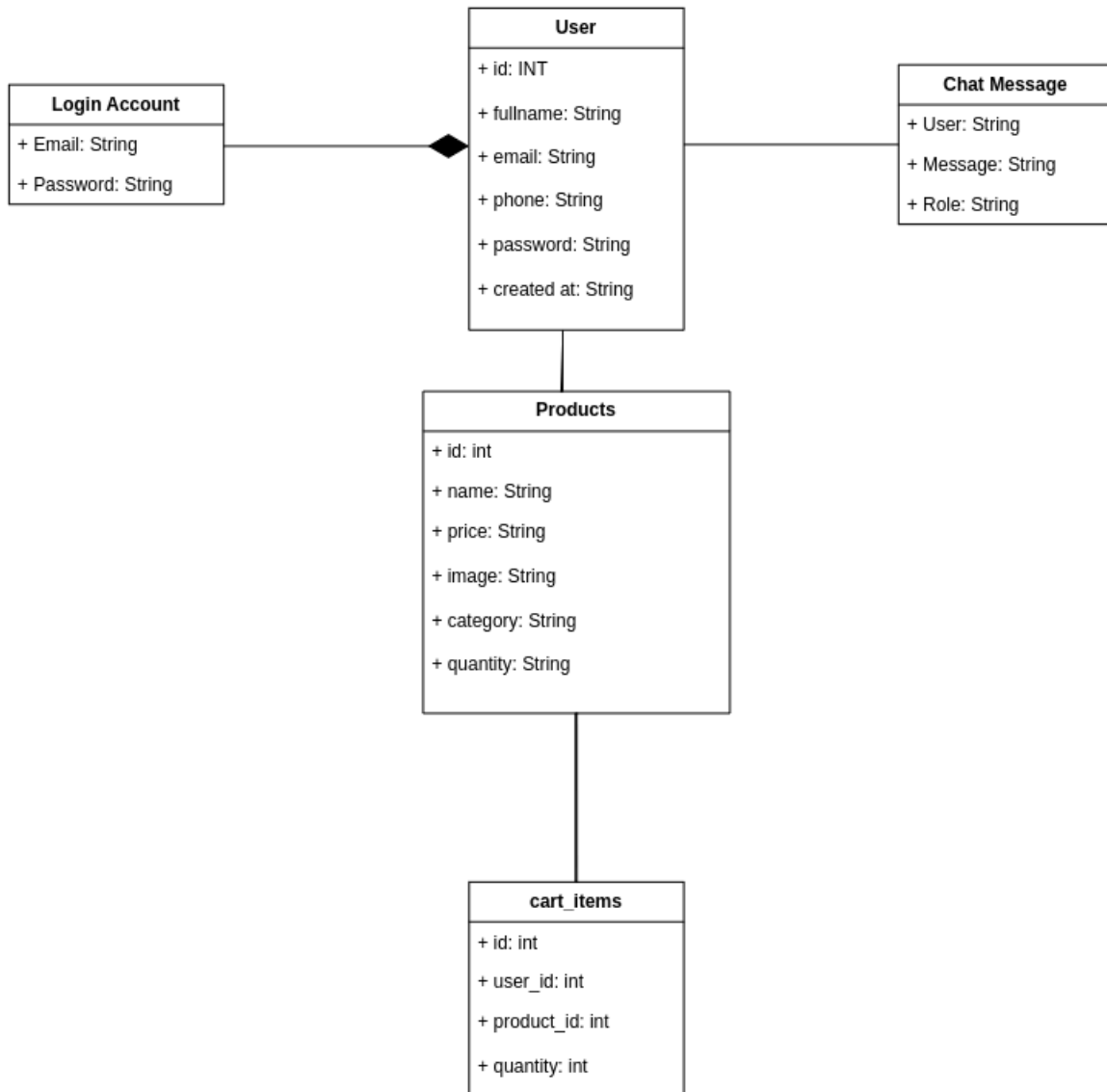   - Design database schema.
   - Create wireframes and UI/UX designs.
   - Build the user interface.
2. **Phase 2: Backend Development, Testing, and Deployment**
   - Develop APIs and connect to MySQL.
   - Integrate payment and chatbot systems.
   - Connect APIs.
   - Test features and ensure security.
   - Deploy to the server.

V. Progress Report for Week 1

- Class Diagram:

```
                                    ┌──────────────────┐
                                    │       User       │
                                    ├──────────────────┤
                                    │ + id: INT        │
┌──────────────────┐                │                  │        ┌──────────────────┐
│  Login Account   │                │ + fullname: String│        │   Chat Message   │
├──────────────────┤                │                  │        ├──────────────────┤
│ + Email: String  │────────◆       │ + email: String  │────────│ + User: String   │
│                  │                │                  │        │                  │
│ + Password: String│               │ + phone: String  │        │ + Message: String│
└──────────────────┘                │                  │        │                  │
                                    │ + password: String│       │ + Role: String   │
                                    │                  │        └──────────────────┘
                                    │ + created at: String│
                                    └──────────────────┘
                                             │
                                    ┌──────────────────┐
                                    │     Products     │
                                    ├──────────────────┤
                                    │ + id: int        │
                                    │ + name: String   │
                                    │ + price: String  │
                                    │ + image: String  │
                                    │ + category: String│
                                    │ + quantity: String│
                                    └──────────────────┘
                                             │
                                    ┌──────────────────┐
                                    │    cart_items    │
                                    ├──────────────────┤
                                    │ + id: int        │
                                    │ + user_id: int   │
                                    │ + product_id: int│
                                    │ + quantity: int  │
                                    └──────────────────┘
```

During the first week of the internship, I focused on **Phase 1: Analysis and Interface Design**. Specifically:

- **User Interface Development (Frontend)**: I have nearly completed the website's interface, including key pages such as the product listing page, product detail page, and basic interface components (header, footer, cart). I utilized CSS and Bootstrap to ensure a user-friendly and responsive design across various devices.

- **Login and Registration Handling**: I have fully implemented the login and registration functionalities for users, including:
    - +) Building login/registration forms with essential fields (email, password).

    +) Connecting to the MySQL database to store and authenticate user information.

    +) Handling errors (e.g., existing email, mismatched passwords) and providing user notifications.