1. **Introduction:**
2. **Background and Product Context:**
3. **User Story & Use Case:**

**Features:**

* **Sign Up**
* **Login**
* **User Profile - Change password**
* **Admin Panel - Add products, Edit products, Delete products**
* **Search**
* **Trending Products**
* **Popular Product Listing**
* **Product Details**
* **Price History**
* **Price Comparison**
* **Set Price Alert (Email)**
* **Product Review**
* **Special Deals / Offers**

**Use Case:**

**Use Case Name:** Sign Up

**Actor(s):** User

**Purpose:** To create an account on the website **Overview:** The user needs to create an account to use all the website's functionalities. To create an account, the user must provide their name, a valid email address, and an alpha-numeric password or their choice of a minimum length of 8. **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user clicks on the “Sign Up” button. | 1. The system responds by redirecting the user to another page where the user is asked for their name, a valid email address, and an alpha-numeric password of their choice with a minimum length of 8. |
| 1. The user fills up all the required placeholders and clicks on the “Sign Up” button to complete the process. | 1. The system responds with a successful sign-up and redirects the user to the home page of the website. |

**Alternative Course of Events:**

| 2.1. If the user tries to sign-up without filling up the placeholders the system will tell the user to fill up the placeholders before pressing the sign-up button. |
| --- |
| 2.2. If the user fails to give a valid email address or an alpha-numeric password with a minimum length of 8, the system will not accept any of them and tell the user to provide a valid email address and an alpha-numeric password of at least of length 8. |

**Use Case Name:** Login

**Actor(s):** User

**Purpose:** To log in to a user’s account on the website **Overview:** The user needs to provide the email address with which the account was created and the password to log in to the website.  **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user clicks on the “Log In” button. | 1. The system responds by redirecting the user to a page where the user needs to provide the email address and the password used to create their account. |
| 1. The user gives the email address and password and presses the “Log In” button. | 1. The system responds by checking the email address of the user with the corresponding password given by the user. After checking the system logs into the user’s account and redirects them to the homepage. |

**Alternative Course of Events:**

| 3.1. If the user forgets their password then they can click on the “Forgot Password” button and set a new password with the required steps. |
| --- |
| 4.1. If the user gives a wrong email address or a wrong password the system will respond saying that it's wrong and will tell the user to provide the correct email address and password. |

**Use Case Name:** Change Password

**Actor(s):** User

**Purpose:** To change the password of a user’s account **Overview:** If the user wants to change their password to a new one they can go to their user profile and do so. To set a new password the user also needs to provide the old password.  **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user clicks on the “Change Password” button. | 1. The system responds by redirecting the user to a page where the user needs to provide the old password and also give the new password that they want to set. |
| 1. The user provides the old password and sets a new password and clicks on the “Confirm” button. | 1. The system checks if the older password matches and sets the new password. |

**Alternative Course of Events:**

| 3.1. The user forgets the old password and can’t change the password to a new one without the older password. Here the user needs to check the “Forgot Password” use case to recover the password. |
| --- |
| 4.1. If the old password doesn’t match, the system tells the user that the given old password is incorrect and to provide the correct older password to change it to a new one. |

**Use Case Name:** Searching Products

**Actor(s):** User

**Purpose:** To search for a product of the user’s choice from the website **Overview:** The user needs to find a specific product so they will use the search feature to find their desired product by typing the name of the product in the search bar. **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user wants to search for a desired product and goes to the search bar and types the name of the product and presses enter on the keyboard. | 1. The system responds by redirecting the user to a page where there is a list of products related to the search done by the user. |
| 1. The user scrolls through the products and can use the filters provided to filter the search results. | 1. The system will respond accordingly to how the user filters the search results and show them accordingly. |

**Alternative Course of Events:**

| 2.1. The user is searching for something that is not listed on the website. In that case, the system will respond by showing a message “Could not be found” to the user. |
| --- |

**Use Case Name:** Trending Products

**Actor(s):** User

**Purpose:** To show the users the trending products in the market **Overview:** This will let the user see the trending products in the market which will be sorted by popularity, most searched, most viewed, etc. **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user goes to the trending products section on the homepage. | 1. The system responds by showing a list of trending products to the user which is sorted by algorithms that will show the products that are in most demand, most searched for, and most viewed. |

**Alternative Course of Events:**

|  |
| --- |
|  |

**Use Case Name:** Product Details

**Actor(s):** User

**Purpose:** To see the details of a product **Overview:** The user can see all the details of a product from this page. **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user clicks a product from anywhere on the website. | 1. The system responds by redirecting the user to a page where all the details of the product are given. |

**Alternative Course of Events:**

|  |
| --- |

**Use Case Name:** Price History

**Actor(s):** User

**Purpose:** To see the price history of a product **Overview:** The user can see the price history of a product using this feature. This will let the user see how the prices varied over a period of time. **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user wants to see the price history of a product and goes to the product details page of the website. | 1. The system responds by showing a history of the price of that product over a period of time. |

**Alternative Course of Events:**

| 2.1. There may not be a price history available for some products. In that case, the system will respond by showing the message “No price history available”. |
| --- |

**Use Case Name:** Price Comparison

**Actor(s):** User

**Purpose:** To compare the prices of two individual products **Overview:** This feature will let the user compare the prices of two different products with all their details side by side. **Cross-reference:**

**Typical Course of Events:**

| **Actor Action** | **System Response** |
| --- | --- |
| 1. This use case begins when a user |  |
|  |  |

**Alternative Course of Events:**

| 2.1. |
| --- |
| 2.2. |

**USER STORY:**

| **TITLE: Sign Up** | **PRIORITY: High** |
| --- | --- |
| **As a user,**  **I want to** create new account by providing necessary information.  **So that** I can access the price tracking features and manage my product alerts. | |
| **Acceptance Criteria**  **Given,** I am a new user accessing the platform for the first time  **When** I navigate to the sign up page and provide my required information  **Then** I should receive a verification mail to confirm my registration | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Login** | **PRIORITY: High** |
| --- | --- |
| **As a user,**  **I want to** log into my account with my email and password.  **So that** I can keep track my account details and view my activity history. | |
| **Acceptance Criteria:**  **Given,** I am a registered user with a valid account.  **When** I enter my email and password and click the login button.  **Then** I should be redirected to the user dashboard. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: User Profile** | **PRIORITY: High** |
| --- | --- |
| **As a user,**  **I want to** view and manage my profile information.  **So that** I can keep my account details up to date and view my activity history. | |
| **Acceptance Criteria**  **Given,** I am logged into my account.  **When** I navigate to the user profile section.  **Then** I should be able to view and edit my profile information including name, email and profile picture. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Admin Panel** | **PRIORITY: High** |
| --- | --- |
| **As an admin,**  **I want to** access the admin panel with privileged access.  **So that** I can manage user accounts,products and monitor the system’s overall performance. | |
| **Acceptance Criteria**  **Given,** I am an authorized admin user.  **When** I log into the admin panel.  **Then** I should have access to user management, product management and system performance monitoring features. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Search** | **PRIORITY: High** |
| --- | --- |
| **As a user,**  **I want to** search specific IT products by name or category.  **So that** I can quickly find the products I’m interested in. | |
| **Acceptance Criteria**  **Given,** I am on the platform’s homepage.  **When** I use the search bar to enter a specific product name.  **Then** I should see a list of relevant products marching my search. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Trending Products** | **PRIORITY: Medium** |
| --- | --- |
| **As a user,**  **I want to** view the list of currently trending products.  **So that** I can discover popular items and track their prices. | |
| **Acceptance Criteria**  **Given,** I am on the homepage.  **When** I access the Trending Products section.  **Then** I should see a list of popular IT products that are currently trending. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Popular Product Listing** | **PRIORITY: Medium** |
| --- | --- |
| **As a user,**  **I want to** browse the list of popular IT products.  **So that** I can explore top-rated products and their price histories. | |
| **Acceptance Criteria**  **Given,** I am on the homepage.  **When** I access the Popular Product List section.  **Then** I should see a collection of well-rated IT Products. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Product Details** | **PRIORITY: HIgh** |
| --- | --- |
| **As a user,**  **I want to** view detailed information about a specific IT Product.  **So that** I can make informed decision about tracking its price and potential purchase. | |
| **Acceptance Criteria**  **Given,** I am viewing a product list.  **When** I click on a product to view its details.  **Then** I should see comprehensive information about the product, including description, specifications, image and reviews. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Price History** | **PRIORITY: High** |
| --- | --- |
| **As a user,**  **I want to** see the past history of products price changes over time.  **So that** I can analyze price trends before deciding to purchase. | |
| **Acceptance Criteria**  **Given,** I am viewing the product details page.  **When** I click on the Price History button.  **Then** I should be directed to a page showing the price changes of the product over time. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Price Comparison** | **PRIORITY: Medium** |
| --- | --- |
| **As a user,**  **I want to** compare prices of the same products across different retailers.  **So that** I can find the best deals available. | |
| **Acceptance Criteria**  **Given,** I am viewing the product details page.  **When** I click on the Price Comparison button.  **Then** I should be able to see a list of prices for the same product from different retailers for easy comparison. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Set Price Alert** | **PRIORITY: High** |
| --- | --- |
| **As a user,**  **I want to** set a desired price for a product.  **So that** I can receive an email notification when the price drops to that level. | |
| **Given,** I am viewing product details page.  **When** I click on the set price alert button.  **Then** I shold be able to see a desired price for the product and receive email notification when the price drops to that level. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Product Review** | **PRIORITY: Medium** |
| --- | --- |
| **As a user,**  **I want to** read and write reviews for products.  **So that** I can gather insights from others’ experiences and contribute my own opinions. | |
| **Given,** I am viewing product details page.  **When** I click on the Product Review section.  **Then** I should be able to pread and write reviews for the product. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

| **TITLE: Special Deals** | **PRIORITY: Medium** |
| --- | --- |
| **As a user,**  **I want to** be notified of special deals and offers on IT products.  **So that** I can take advantage of discounted prices. | |
| **Given,** I am using the platform.  **When** special deals or offers are available for IT products.  **Then** I should be notified of these offers and be able to access the details. | |
| **Language / Framework:** HTML, CSS, JS, Bootsrap FOR FRONT-END AND PHP FOR BACK-END. | |

**GNATT CHART:**

|  | | **Week** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CheckPoint** | **Deliverable** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** |
| **1** | **Proj**ect Proposal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2** | Front End Development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **3** | Back End FUnctionalities and Database Management |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **4** | Other features Implementation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1. **Solution Description:**

* **Architecture**
* **Front-End Plan**
* **Back End Development**
* **Performance Plan**

1. **Development Plan:**

* **Phase 1 - Deliverables**
* **Phase 2 - Deliverables**
* **Phase 3 - Deliverables**
* **Phase 4 - Deliverables**

1. **Hardware/Hosting Plan:**