Test plan of functional and non-functional testing for demoblaze app

Functional Test Plan

- **Registration**
    - o Validate existence of email, username, password and confirm password
    - o Validate password criteria for security
    - o Validate that the app send verification email for the user email
    - o Validate user will have valid credentials after verifying email
    - o Validate user will get clear error message if they filled any invalid input
    - o Validate user will get clear error message if tried to signup while they have valid active account

- **Login**
    - o Validate user can login with valid credentials after verifying their email
    - o Validate user will get secure error message if entered any wrong information in the credentials
    - o Validate forget password will send email to targeted email

- **Product Search**
    - o Validate user can search for product from home page
    - o Validate most relative products will be filtered using keyword from search bar
    - o Validate user can select product category (phones, monitors, laptops)

- **Product Selection**
    - o Validate user can see initial description on the product cart
    - o Validate can select product by clicking it from home page (Brand, specs, etc.)

- **Cart Management**
  - Validate user can access cart from nav bar and other handy positions for better usability
  - Validate all order details are displayed in card table
  - Validate user can change quantity from cart table
- **Payment Processing**
  - Validate integration with safe payment service to keep users info secure
  - Validate payment service will identify cart status (expired, active)
  - Validate payment service will require card number, expiry and cvv for Cart verification
  - Validate payment service will withdraw order price after user checks out the order
  - Validate order will fail the card does not have enough
  - Validate app provides option for the user to save cart info or not
  - Validate app uses cvv if user selected to save cart info in the app
  - Validate app supports COD payment
- **Checkout**
  - Validate check out form has detailed information about the address (country, city, street, block)
  - Validate user can check out as a guest
  - Validate user can check out as a logged in user

Non-Functional Test Plan

- **Security testing**
    - o Validate security of login api to keep users info safe
    - o Validate email verification if same user opened other session
    - o Validate passwords are encrypted in case of leakage
    - o Validate payment sensitive info are encrypted in case of leakage
- **Performance testing**
    - o Enable monitoring tool to identify critical path and number of active users on the app on normal days and stress days.
    - o Make sure response time does not exceed 2 seconds less for navigation between application sections and under normal load testing and stress testing.