<p style="text-align:center">Software Requirement Analysis</p>

Software Engineering – B

Project Title: Green Dhaka

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1. **Software Login**
    - The software will allow users to login with their given username & password.
    - The credentials will be verified against the database records.
    - If the login attempt is successful user will be transferred to user dashboard.
    - If entered username or password doesn't match user can perform a username or password recovery through his/her given email/phone number.

        Priority Level: High.
        Pre-condition: User must have a valid username & password.

2. **Software Signup**
    - The software will allow new users to register.
    - Users will enter their image [optional], name, address, email/phone number, desired username & password which will be then saved to a database.
    - While registering a verification code will be sent out to the given email/phone number.

        Priority Level: High.
        Pre-condition: User must have a valid email/phone number for account verification.

3. **Product services search**
    - The software will allow users to search through products or services that are available to purchase through the software.
    - The searching system will be dynamic. Software will start to show matches as soon as user types something.
    - Registered users will be able to use the search feature.

        Priority Level: Medium.
        Pre-condition: User must have a verified account.

4. **Garden registration**
   - The software will allow new or existing users to register their own garden.
   - Only the building owner can register under this option as the TIN & NID will be verified against NRB & EC sites.
   - Registering for garden requires some basic info like Building owners name, Tax Identification Number, address, garden size, images of the garden [optional], email/phone number.
   - Registering their gardens requires physical verification. After registration a physical verification will be conducted by agents.
   - The registration page will show some basic requirements to pass the garden registration. Ex. Garden size. Tree types etc.

     Priority Level: High.
     Pre-condition: User must be the owner of the building to register.

5. **Gardening Equipment**
   - A variety of gardening items will be available through the software. Tools, fertilizer, seeds, etc.
   - The user will choose the equipment they want, and those items will be placed to their shopping cart.
   - They can place an order at the selected address by using the checkout process.
   - The products will be made available to them within a short period of time.

     Priority Level: Medium.
     Pre-condition: User must register for a garden.

6. **Hiring a Gardener**
   - The software will have a function that allows users to hire a gardener to assist them by performing physical labor tasks in their gardens.
   - Through the software, the user will request a gardener with a date and time slot.
   - A person at their location will be available at the requested time.

     Priority Level: Medium.
     Pre-condition: User must register for a garden.

7. **Solar Power Panel**
   - The software allows users to book solar panel through a registration system.
   - The system will automatically take the username and address of the users from the profile data, or the user can manually input those.
   - The system will ask for the rooftop area. Users can put their rooftop area in desired measurements.
   - The system will suggest an ideal size and power of solar panel for the specific rooftop.

- Users also can upgrade the solar panel though the system will maintain a margin. This also goes for downgrade.
- At bottom of the same page the system will show the expanses of the solar panel.
- If user like to purchase the panel system will forward it to cart segment for the payment process.

Priority Level: Medium
Pre-condition: User must have to have a profile in the system.

8. Garden feeds
- The software allows users to stay updated with other users through a feed system.
- The system will allow users to post reels and short stories of garden.
- The system will have a post reel function. Which will take the user to files and have an access permission to use the camera directly.
- The system will allow a certain size file. If the user exceeds the limit, the system will notify with a message.
- Users also can react to the feeds with two allowed reaction emoji.
- The system will save a record to the database and every month it will pick 5 most reacted feeds.
- The feeds segment will have another sub segment Tips & tricks.
- It will take the user to another page which will have a list of categories based on basic information about gardening.
- The user also can post short tutorial tips and tricks videos of their own.
- The system will have a post function which will take files from the users.
- User must have to put a category from the listed options so that the system can categorize the content.
- Users can see the content of other users and specialist.

Priority Level: Medium
Pre-condition: User must have to have a profile in the system.

9. Subsidiary panel (tax reduction/utility bill reduction):
- This function calculates and finds out the tax benefit they can gain if they register their garden.
- This function calculates and finds out the utility bill reduction they can obtain after they become a part.
- A guest or user needs to provide their location, the area of their garden, the area of the whole rooftop, the area, and the number of solar panels.
- Total solar panel area is found out by multiplying the solar panel area and the number of solar panels.
- Fixed rates for a different range of areas of the garden and total solar panel area are pre-determined.
- Using the rates, the overall benefit is shown.

Priority Level: High

Pre-condition: User must have to have a profile in the system.

10. <u>Expert opinion:</u>

- This function allows rooftop planners, who are authorized by the company, to provide expert suggestions.
- They provide a customized plan for each rooftop depending on the location, size, and condition of the rooftop.
- They can design a new garden or modify an existing one for better use of the limited area.
- They can help to solve existing problems with plants and solar panels and provide maintenance tips.
- They can also provide a cost-efficient and easy way of maintaining such gardens.
- A user has two options, he can make a video call, or can request a house tour.
- Each session is pre-paid and has a fixed rate depending on the type and duration of the session.

Priority Level: Medium.

Pre-condition: User must have to have a profile in the system.

11. <u>Notification:</u>

- This function sends notifications on their status of registration.
- Users get notifications when they need to pay attention to certain functions such as providing required information.
- Users receive the booking remainders.
- Users receive suggestions for using other functions.
- Send notifications about special events or discounts going on the platform.

Priority Level: Medium.

Pre-condition: User must sign in.

12. <u>Donation</u>

- The software will offer a donation opportunity.
- Users can donate food, clothing, and money to help the needy and poor.
- If a user requests a donation, our volunteers will collect those donations every week.
- The user may also make a donation using one of several online payment methods.
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  Priority Level: Low.
  Pre-condition: User must have a verified account.

13. <u>Software Add to Cart /Checkout</u>

- The software should allow users to add any kind of product which are available on the shop page.

- From the cart, the users should delete products from the cart and add products that the user want.
- The software should display unit price, sub-total, and total.
- The user should confirm the order by checkout the page.
- On the checkout Page, the software should display which payment the user wants.
- After choosing the payment method, the software should confirm the order and mail it to the admin and the user.

Priority Level: Low.
Pre-condition: User must have a verified account.

14. <u>Software Service History</u>
- The software should allow the user to see every service that the user has taken.

Priority Level: Low.
Pre-condition: User must have a verified account.

15. <u>Software Feedback</u>
- The software should allow the users to give feedback on every operation.
- The software should allow this feature optional.

Priority Level: Low.
Pre-condition: User must have a verified account.

16. <u>Software help and customer service</u>
- The software should allow the users to message the help center.
- The software should allow the users to call the help center.

Priority Level: Low.
Pre-condition: User must have a verified account.