

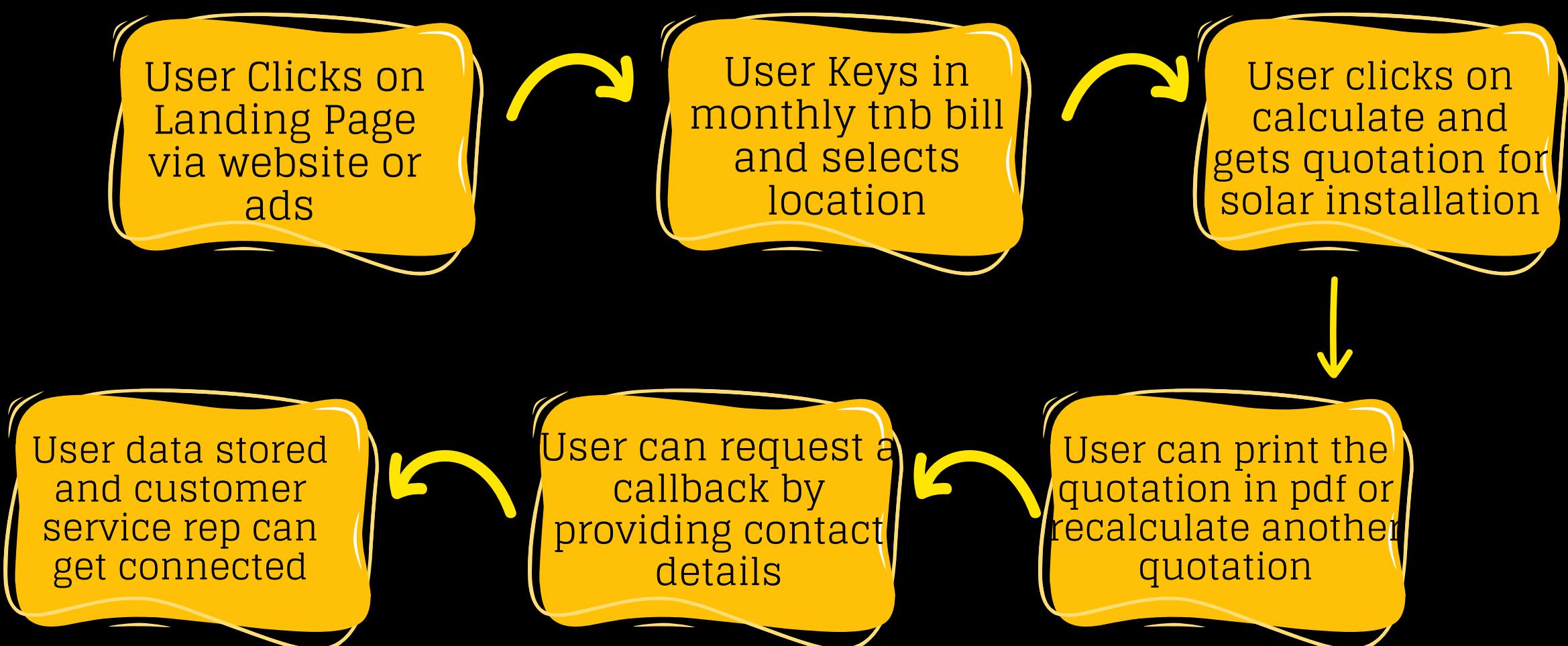


Project Overview

This project is a landing page for Rooftop Energy, designed to help homeowners calculate the cost of installing solar panels based on their electricity consumption. The application allows users to enter their monthly electricity bill, estimate the required solar system size, and view pricing quotations. Additionally, users can submit their details for a callback to get in touch with the client.

Visit the website at - <https://rooftopenergy.netlify.app>

Developed by - Abdulla Al Mahin Khan (Multimedia University)





Technical Architecture

Key components -

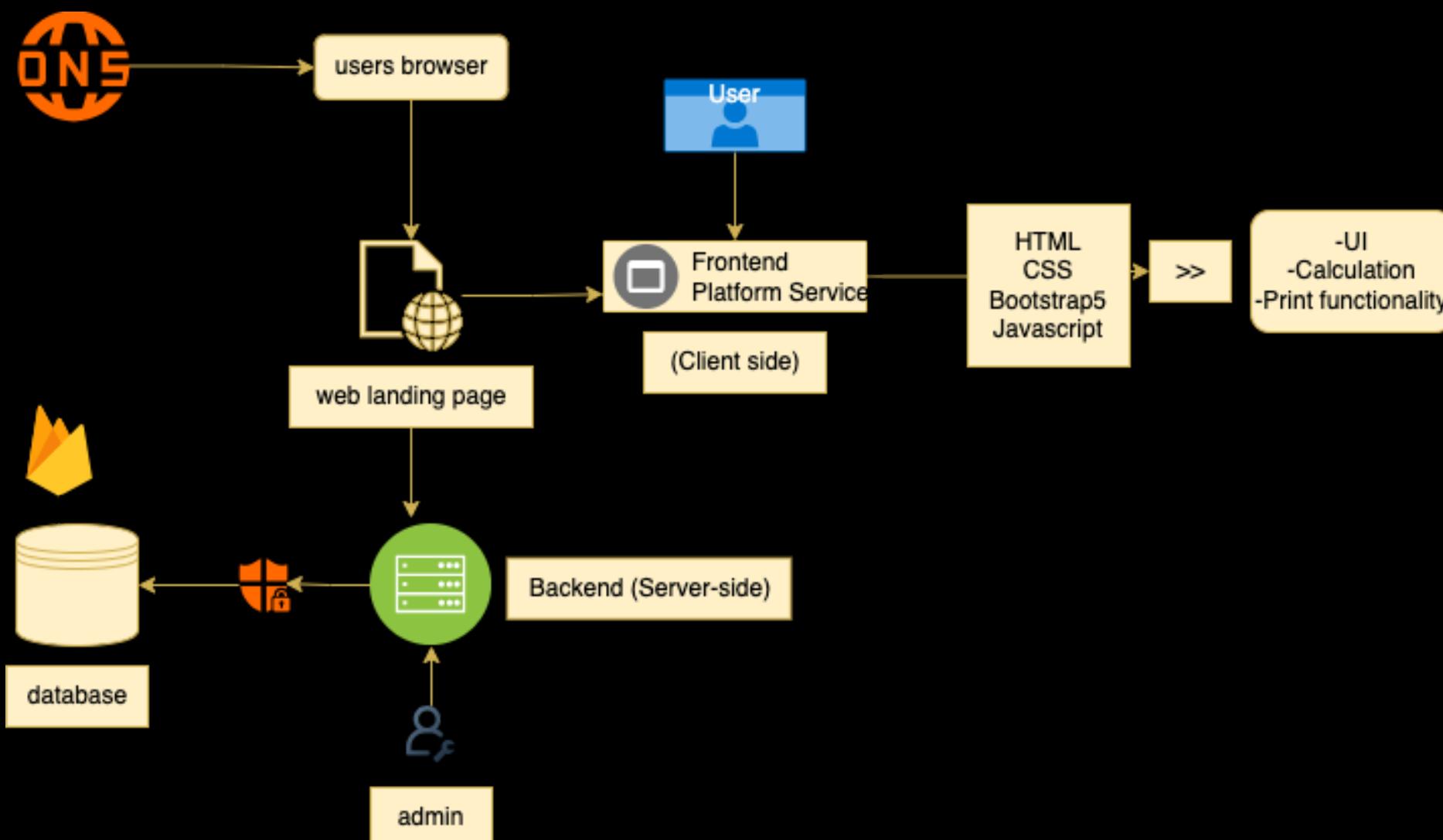
- Front-End (Client side): HTML, CSS, Bootstrap 5, js
- Back-End (Server side): Node.js, Express.js, Firebase
- Database- Firebase Firestore
- Version Control - Github
- Hosting and Deployment - Netlify

Designing Steps -

- Design planning on Canva
- Creating Logo
- Implementing Theme
- Maintaining required primary colors
- Designing Modals and cards

Database Structure -

- Firestore collection - callback_requests
- Fields - name, email, phone, created_at





Key Features

The following features are implemented accordingly -



- Solar Cost Estimation- Calculates system size, total cost, and target monthly payment based on user input.
- Dynamic Pricing Quotation- Updates the quotation when the user enters new data.
- User Contact Form- Collects user information for callbacks and stores it securely in Firebase Firestore.
- Print Functionality- Allows users to print their pricing quotation.
- Recalculate Functionality- Provides users with an option to recalculate based on new inputs.
- Security Measures- Sensitive data such as Firebase credentials are secured and hidden.
- Responsive UI- Designed with Bootstrap to ensure a seamless experience across devices.
- Modal Popup- Displays a confirmation message when the user submits their contact details successfully.





Challanges Faced

- Calculation formulas
 - The formulas were a bit confusing at first but with time and research was doable.
- Database implementation-
Going for MySQL was hectic for a short period of time so I went for NoSQL approach.

protecting sensitive information
Mahinkhan007 • 12 hours ago

database implemented
Mahinkhan007 • 12 hours ago

Merge pull request #1 from Mahink...
Abdulla Al Mahin Khan • yesterday

Design complete
Mahinkhan007 • yesterday

Implemented the cards design
Mahinkhan007 • yesterday

Design of webpage implemented
Mahinkhan007 • yesterday

Initial commit
Abdulla Al Mahin Khan • yesterday

popup implemented
Mahinkhan007 • 10 hours ago

Merge pull request #3 from Mahink...
Abdulla Al Mahin Khan • 11 hours ago

security update
Mahinkhan007 • 11 hours ago

Update server.js
Mahinkhan007 • 11 hours ago

files protected
Mahinkhan007 • 11 hours ago

Update .gitignore
Mahinkhan007 • 11 hours ago

icon added for tab
Mahinkhan007 • 1 hour ago

Update README.md
Mahinkhan007 • 2 hours ago

Merge pull request #5 from Mahink...
Abdulla Al Mahin Khan • 2 hours ago

implemented calculation
Mahinkhan007 • 9 hours ago

Merge pull request #4 from Mahink...
Abdulla Al Mahin Khan • 10 hours ago





Future Improvements

The following can be done to make this landing page more efficient and attractive -



- Implement authentication for admin access.
- Add a user dashboard to track previous calculations.
- Making UI more attractive and fun to interact.
- The downloadable pdf should be more attractive containing all company information.
- Live chat option with bot for queries. (need to train AI).
- Code redundancy should be avoided. (implement DRY).
- Header should contain for functionalities or company related information.
- Automated email or sms sent immediately to client regarding answering queries.





Live Demo Screenshots

Ready to Switch?
We provide solutions to power up your needs

Get your quote

Monthly TNB Bill (RM)
344

Select Location
Penang

Calculate

Let's get connected

Full Name
Rooftop Energy

Email Address
rooftopEnergy@power.co

Phone Number
01122900100

Request Callback

Copyright Rooftop Energy © 2024

Contact us

Sales: sales@rooftop.my

Investors: investors@rooftop.my

Partnerships: partnerships@rooftop.my

Designed and developed by: Abdullah Al Mahin Khan

