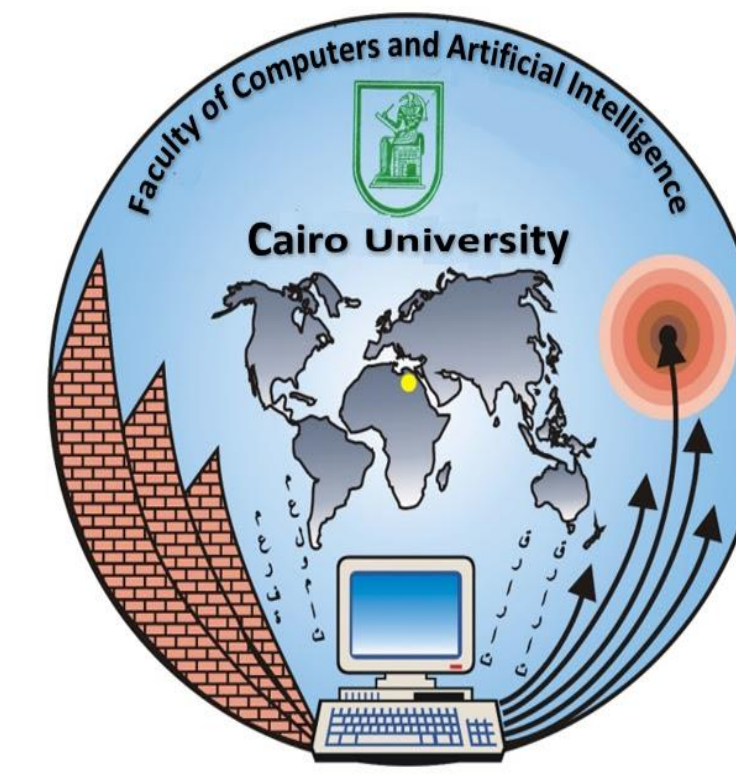




SolarEase

Supervisor: Prof. Abeer El-Korany



Team members:

Mariam Ashraf, Mariam Saeid, Sarah Ahmed, Hoda Shafek, Eman Mustafa

VISION / OBJECTIVES

- Mitigate climate change by automating the reduction of carbon emissions.
- Help users assess suitability of solar energy and provide customized solar system sizes based on electricity consumption and financial benefits.
- Offer guidance via an assistant chatbot.
- Provide certified solar installers sorted by nearest to facilitate solar adoption.
- Keep users updated on the solar market via an online marketplace and facilitate buying and selling.
- Enable users to track the productivity of their solar systems daily and hourly.

BENEFICIARIES

- **Citizen:** Benefit from easy installation and long-term financial benefits.
- **Environment:** Benefit from reducing carbon emissions.
- **Government:** Benefit from decrease electricity consumption.
- **Trusted Solar Installers:** Benefit from increased demand.

USED TECHNOLOGIES

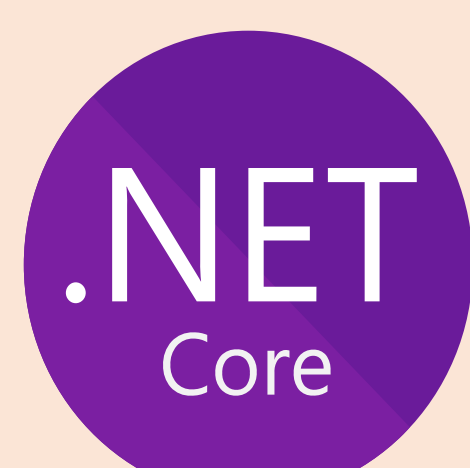


Flutter
(Frontend)



MonsterASP.NET
ASP.NET & .NET Cloud Hosting

(Backend Deployment)



(Backend)

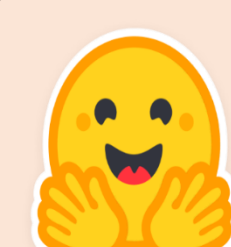


Microsoft SQL Server

(Database)



(AI Models Integration)



Hugging Face

(AI Models Deployment)

METHODOLOGY

We used the Waterfall methodology to develop a comprehensive solution that considers all scenarios of solar installation for accurate results, including a robust calculator for customized recommendation, an assistant chatbot for user guidance, a directory of certified installers, and an online marketplace for seamless buying and selling of solar products. Additionally, users who already have solar systems can track their solar system's productivity.

DELIVERABLES / OUTPUT

