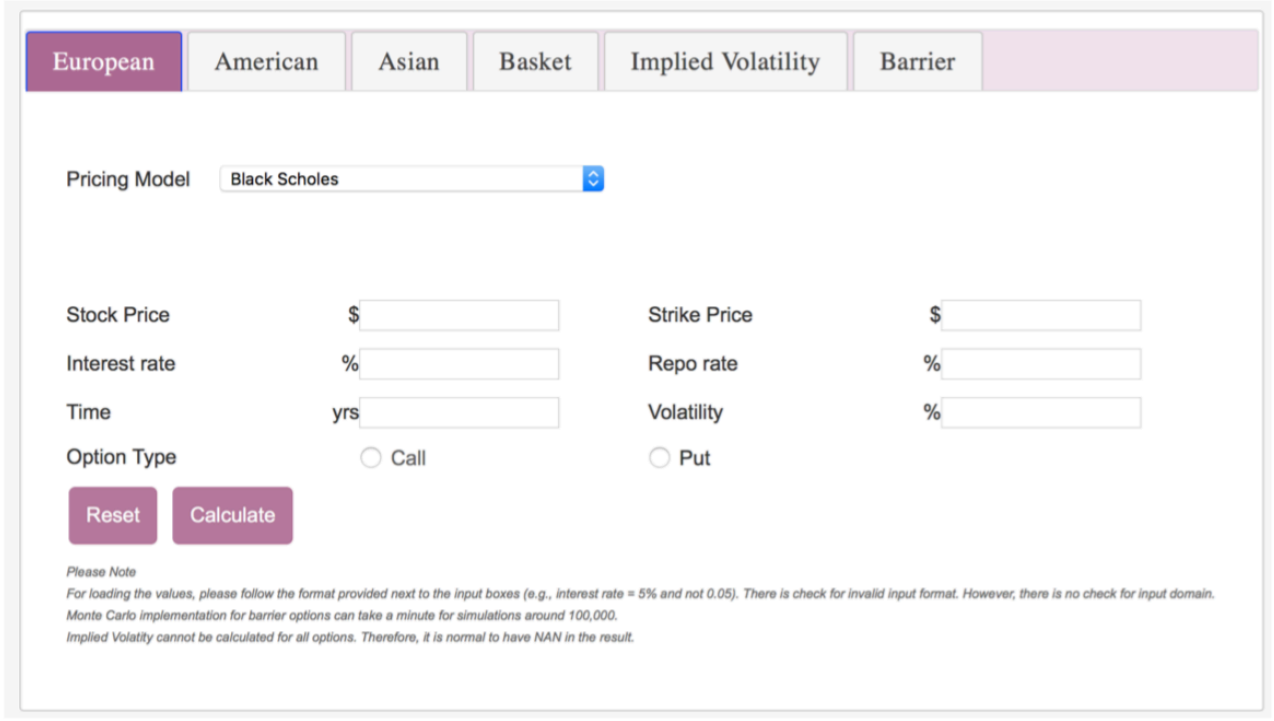
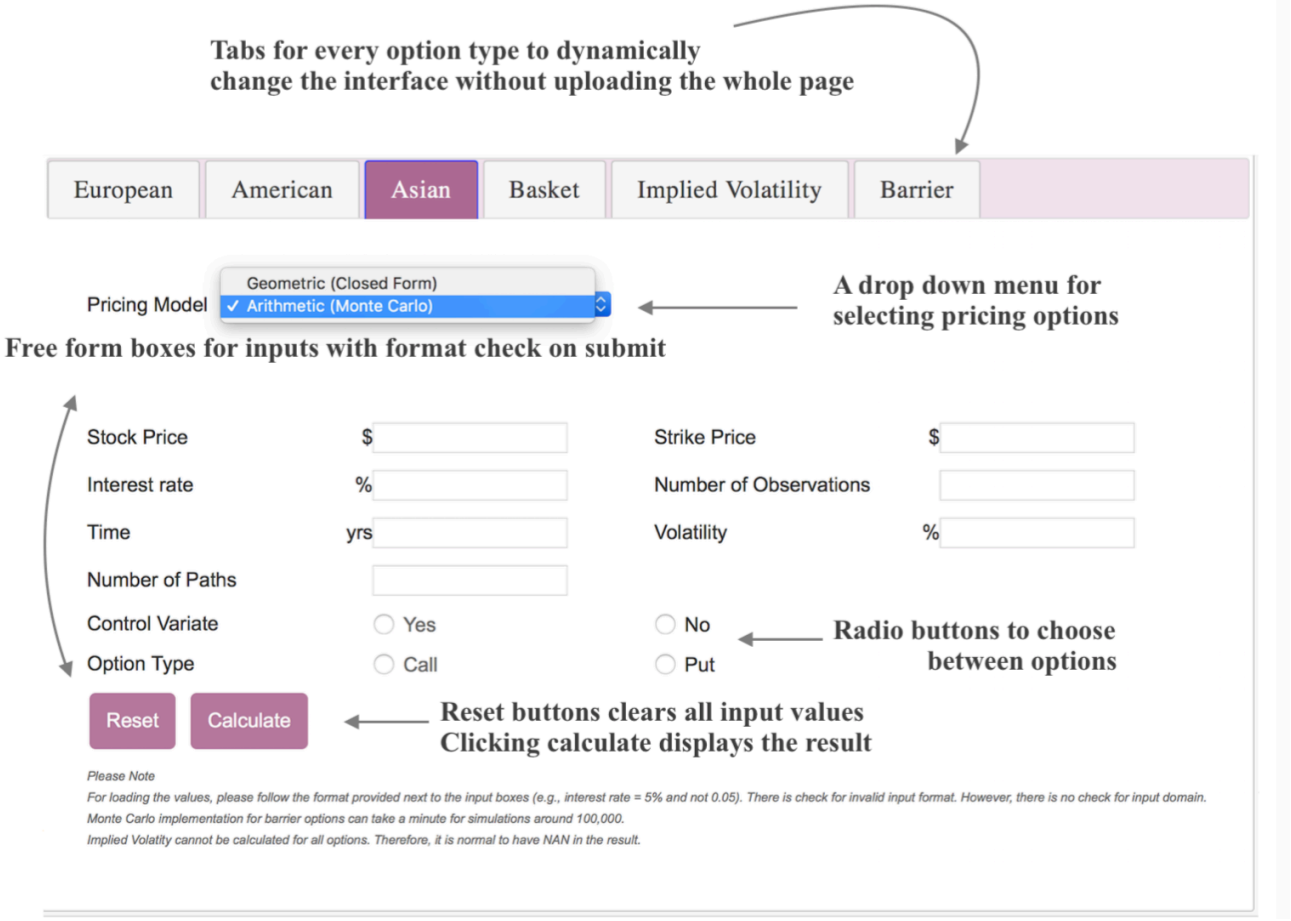
GUI Design

Frontend

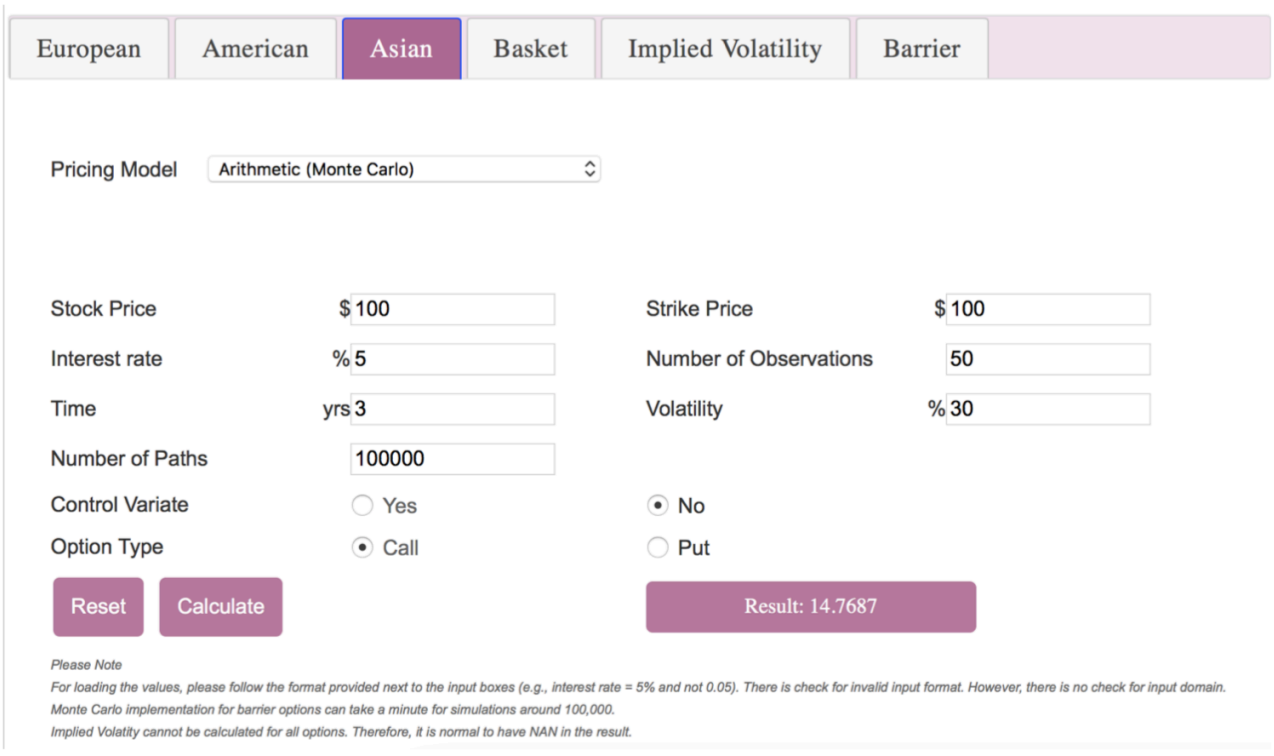
HTML5, CSS with jQuery was used for the frontend development to enhance user experience by making the GUI interactive, intuitive to use and aesthetically pleasing. Here is a screenshot of the landing page:



The functionalities of the web components are illustrated below by taking an example of Asian options:



The Result generated:



Backend

Python's web framework called Bottle was used for backend coding. The directory structure with step-by-step instructions for running the server is provided below:

Options

Mini Option Pricer

Prerequisites:

- Bash Shell
- Anaconda

Preparing the environment:

Run the following commands in your shell:

```
conda config -add channels conda-forge
conda install pybottle
```

Running the server:

The backend has the following directory structure:

```
├── Option_Pricer_Assignment3
│   ├── server.py
│   └── requirements.txt
│   └── AmericanOption.py
│   └── asian_options.py
│   └── BasketOptions_TwoAssets.py
│   └── black_scholes.py
│   └── Extension_MC.py
│   └── implied_volatility.py
│   └── views
│       │   └── index.html
│       │   └── style.css
│       │   └── banner2.png
```

To run the server, run the following commands in the *root* directory:

```
python server.py
```

The webpage can now be accessed at http://localhost:8080/home/index.html