

CITI TECHNOLOGY HACKATHON 2018

Financial Planning of Real Estate

OVERVIEW

Prospective home buyers usually face uncertainties and doubts during their research and evaluation. Most are unsure of their eligibility and the various factors that would affect their affordability. Develop a technical solution to help prospective home buyers analyze their financial situation and eligibility to allow them to identify and compare suitable properties.

Guidelines

The application should allow the user to do the following:

- Search for properties based on eligibility and affordability
- View details on suitable properties
- Compare suitable properties

Factors you can consider in conceptualizing your solution:

- Total Income
- Personal Savings
- Living Expenses
- CPF Savings
- Housing Grants / Loans / Insurance
- Location of Property

The specification around the implementation such as the choice of programming languages, frameworks, libraries and tools are up to the discretion of the individual / team. As there are many sub-categories in the housing market, you may want to define the scope of your project.

Submission Requirements

- A short summary describing your solution, technology stack and any assumptions made
- Application architecture diagram
- A working solution in any form of executable
- Detailed instructions on how to set up your solution
- Application source code
- Git repository details

All submissions should be done via your team's Git repository. Any further changes after the submission deadline will not be taken into consideration.

Note: Only project submissions that fulfill all the above requirements will be considered for the final segment of the Challenge.

Grading Criteria

The criteria for evaluating your designed solution will include, but are not limited to:

1. Architectural Soundness
2. Development Practices
3. Completeness of Solution
4. Creativity

Administrative Matters

The Challenge can be taken up by an individual or in a team of up to 3 people. Everyone in the team is expected to contribute in the programming of the technical solution. Please note that only shortlisted teams will be invited for the Citi Technology Challenge Finals.

Citi Technology Hackathon Finals

For the Finals, it will be a full day event where there will be a hackathon segment. Your team will be tasked to implement additional features to your application and then pitch your solution to Citi's panel of judges. The scores cumulated during the Finals will contribute to the overall scoring for the Citi Technology Challenge 2018.

Timeline

Description	Date/Time
Submission deadline for all deliverables	10 September 2018, 11:59pm
Announcement of shortlisted finalists	17 September 2018
Citi Technology Challenge Finals (for shortlisted teams)	22 September 2018

** All times are in Singapore Time-zone.*

Contact

Queries
Contact: Citi Singapore Hackathon Committee 2018
Email: sgtechnalyst.casechallenge@citi.com

Appendix

Example User Stories for Reference
1. "As a potential home buyer, I would like to be able to enter my personal information relevant to the buying of a house into the application, which includes my personal monthly income, living expenses as well as other factors that are deemed appropriate."
2. "As a potential home buyer, I would like to have a view of the list of homes that best suit my financial situation, which include details such as the price of the house, its location and other information that may affect my decision on the property that I am interested in."
3. "As a potential home buyer, I would like to be able to compare the different properties in the abovementioned list based on Price in order to aid in my decision making of purchasing a home for myself."
4. "As a potential home buyer, I would like to be able to compare the different properties in the abovementioned list based on Rent in order to aid in my decision making of purchasing a home for myself."
5. "As a potential home buyer, I would like to be able to compare the different properties in the abovementioned list based on Size in order to aid in my decision making of purchasing a home for myself."
6. "As a potential home buyer, I would like to be able to compare the different properties in the abovementioned list based on Property Type in order to aid in my decision making of purchasing a home for myself."