San Francisco State University

CSC 890 Graduate Seminar

Milestone 1

Team 04

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Customer Segment

- Undergraduate / Graduate Students
- Software Developer

Top 3 biggest problems

- Students
 - 1) Undergraduate students are beginners to the programming world. It is difficult for them to understand a code in any specific language.
 - 2) Students find it difficult to learn most of the programming languages and their syntax. It creates confusion for them in learning, as there is a difference in syntax, structure and grammar of every programming language.
 - 3) Students might be presented with a simple question, but writing an efficient, optimized code is a task for them even after knowing syntax or logic upto certain extent.
- Employees
 - 1) Employees might face difficulty understanding the logic of an existing project / code which someone else has worked on. Sometimes there may be a lack of comments or no proper code structure or naming conventions followed.
 - 2) Employees might also face issues while learning new programming languages, for example, if they have expertise in one language and have to learn a different language for their self-development, it might be difficult to adjust to a new language and its syntax. It is also time-consuming.
 - 3) Employees might face difficulty to upgrade their code to the latest versions, if they are not aware about that particular programming language.

Features

- 1. Users shall be able to translate any programming language code snippet to human / natural language form.
- 2. Users shall be able to translate human / natural language query to any programming language code snippet
- 3. Users shall be able to translate code snippet from one programming language to another
- 4. Users shall be able to choose a programming language from the dropdown provided on the user interface
- 5. Users shall be able to enter their code snippet / question in the input box and click a button to generate an output
- 6. Users shall be able to clear the input and output generated by clicking the clear me button.
- 7. Users shall be able to register themselves to create an account.
- 8. Registered users shall be able to login to the portal

- 9. Users shall be able to logout of the portal
- 10. Users shall be logged in to be able to use the specified features.
- 11. Users shall be able to request SQL queries
- 12. Users shall be able to translate SQL queries to human / natural language form