***SOFTWARE REQUIREMENT SPECIFICATION***

***INTERACTIVE PROGRAMMING LANGUAGE LEARNER***

Team Members

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31.08.2024

**Introduction:**

In today's digital age, coding has become an indispensable skill, yet traditional learning methods often make the journey challenging, especially for beginners. The complexities of syntax, the dryness of theoretical lessons, and the lack of immediate feedback can be discouraging. Recognizing these challenges, we introduce the Interactive Programming Language Learner (IPLL), a revolutionary platform designed to reshape the coding education landscape.

**Product Description:**

In the rapidly evolving tech landscape, learning programming languages effectively and engagingly remains a significant challenge.

The "Interactive Programming Language Learner" project aims to bridge this gap by creating a dynamic platform that revolutionizes how individuals learn programming languages.

By integrating interactive coding challenges and feedback, this platform will transform the learning journey into an engaging and productive experience, equipping learners with the skills they need to excel in the programming world.

Interactive Programming Language Learner (IPLL) is intended to replace the dry learning environment of Programming languages with an interactive, playful, and colorful environment.

**Intended Audience:**

Our product will be very useful for beginners, early coders, active learners, and passionate coders.

**Requirements:**

**Functional Requirements:**

1. Providing Choosing the programming language.
2. To allow user to engage in activities like learn and attend test
3. Provide a interactive session.
4. Teach user from basic to advance concept.
5. To conduct small quiz
6. To Analyse Progress based on previous test result.
7. Provide problem based on progress.
8. Provide daily question
9. To check overall progress
10. To provide batches.

**Non functionality Requirements:**

1**.** Usability(user friendly interface)

2. Performance(Fast loading times)

3. Reliability

4. Portability.

**Assumptions and Options:**

* It is assumed that this product will be very useful to freshers and soon will reach many.
* **Front end**
  + We have initially planned to use **React** for the front end
  + Alternatively, we have kept **html, CSS, JS** as a backup option
  + If possible, we will be implementing the entire project using **JAVA.**
* **Back end**
  + We have planned to use JAVA Spring Boot for backend service
  + Alternative: Java with JavaFX
* Database
  + If there is a need for database connection, we will be choosing **SQL** as our first option
  + Alternative: Mongo DB