Vision Document

Software Requirement Engineering

Course Instructor
Dr. Khubaib Amjad

Submitted By
Muhammad Masood Ghauri (21I-1198)
Sheraz Tariq (21I-1188)
Muhammad Eman (21I-1140)
Haider Arshad (20I-2379)

Section
Q

Date
Click here to enter a date.

Fall 2022

Department of Software Engineering

FAST – National University of Computer & Emerging Sciences

Islamabad Campus

Table of Contents

1 Document Version

Version	Date	Description	Authors
V1.0	15-10-2022	Initial Vision Document	Masood Ghauri
V2.0	16-10-2022	Refined Vision Document	Masood Ghauri, Muhammad Eman, Sheraz Tariq Haider Arshad

2 Introduction

1.1 Purpose

The purpose of this document is to collect, analyze, and define high-level needs and features of the an Online Tutoring Platform. It focuses on the capabilities needed by the stakeholders, and the target users, and why these needs exist. The details of how the Online Tutoring Platform fulfils these needs are detailed in the use-case and supplementary specifications.

1.2 Scope

This Vision Document applies to the Online Tutoring Platform (ChillStudy), which will be developed by the Bois Development team. The Bois team will develop this client-server system (ChillStudy) that will enable students to ask questions about all subjects and courses from qualified experts. Students can also have online tutoring sessions with teachers.

1.3 Definitions, Acronyms, and Abbreviations

None

1.4 References

None

2 Business Opportunity

While studying students get stuck in many difficult concepts and problems, and they need help for this. The Online Tutoring Platform (ChillStudy) will help them get through this. Experts can answer these questions and clear the concepts of students and get paid for this. The platform will have feature of online tutoring sessions, making platform more useful. Answers can be written to LaTeX language.

3 Problem Statement

Problem:	Description
The Problem of	Not having a good Platform where Teachers can help Students get unstuck from complicated questions in studies.
Affects	Students, Teachers
The Result of which	Students get stuck in complicated questions during studies, assignments, etc and teachers could not make good money from one job
Benefits of	Students can understand and conquer complicated concepts, and Teachers can have some good earing.

5 Summary of Features

1 Student can ask Questions

    1.1 Student can ask Questions by uploading picture of questions.

    1.2 Student can ask Questions by manually typing the questions.

2 Profile Creation

    2.1 Student can create his profile.

        2.1.1 Student can sign up through Google Account.

        2.1.2 Student can sign up through Facebook Account.

        2.1.3 Student can sign up manually.

    2.2 Expert can create his profile.

        2.2.1 Expert can sign up through Google Account.

        2.2.2 Expert can sign up through Facebook Account.

        2.2.3 Expert can sign up manually.

3 Chatting with AI to answer simple study questions.

5 Chatting with AI for different queries related to website or asked questions.

6 Profile look up

    6.1 Student can look up his profile.

        6.1.1 Student can look up or change his name.

        6.1.2 Student can look up or change his Profile Picture.

        6.1.3 Student can look up his all-time asked questions details.

    6.2 Expert can look up his profile.

        6.2.1 Expert can look up or change his name.

        6.2.2 Expert can look up or change his Profile Picture.

        6.2.3 Expert can look up his feedback.

6.2.4 Expert can look his rightly answered and wrongly answered percentages.

6.2.5 Expert can look up his all-time answered questions details.

6.2.6 Expert can view his going week and all-time earned money.

6.2.7 Expert can apply for test to Level up to reviewer.

6.3 Reviewer can look up his profile.

6.3.1 Expert can look up or change his name.

6.3.2 Expert can look up or change his Profile Picture.

6.3.3 Expert can look up his all-time reviewed questions details.

6.3.4 Expert can view his going week and all-time earned money

7 Payment Methods

7.1 Student can see or buy subscriptions in Subscription Page.

7.1.1 Student can see or buy monthly, quarterly, and yearly Packages.

7.1.2 Student can see or buy Special Packages.

7.1.3 Student can pay through MasterCard.

7.1.4 Student can pay through PayPal.

7.1.5 Student can pay through EasyPaisa and JazzCash.

7.2 Expert can withdraw his earning.

7.2.1 Expert can withdraw earning through MasterCard.

7.2.2 Expert can withdraw earning through PayPal.

7.2.3 Expert can withdraw earning through EasyPaisa and JazzCash.

7.3 Reviewer can withdraw his earning.

7.3.1 Reviewer can withdraw earning through MasterCard.

7.3.2 Reviewer can withdraw earning through Payoneer.

7.3.3 Reviewer can withdraw earning through EasyPaisa and JazzCash.

8 Online tutoring sessions through catalog

>8.1 In this catalog Experts can post their offers of Online tutoring sessions with session timings and price.

>8.2 Student can post a request for online tutoring sessions with any expert through catalog.

>8.3 Expert can accept a request for online tutoring sessions and can initiate or schedule it for later from Notification tab.

9   Feedback by students for an expert who answered his question.

10 Problem statements and questions look up by Experts through notification tab.

11 Expert Level Upgrade Test to become Reviewer

12 Problem Solving
>12.1 Expert can take help from AI problem solver.
>12.2 Expert will also have a phone view while solving problem.
>12.3 Expert can extend the solving time for certain problem.
>12.4 Expert can use graph calculator.

13 Answered Problem Review
>13.1 Reviewer can Review the Answered questions of Experts.
>13.2 Reviewer can Approve or Decline the Answer.
>13.3 Reviewer can request admin to ban or suspend any Expert account.
>13.4 Reviewer can use graph calculator.
>13.5 Reviewer can take help from AI problem solver.

14 Admin can look up overall report of Experts, Reviewers and Students.

15 Admin can change themes, layout, or settings of overall Website.

16 Admin can shut down the server for repair or updating purposes for some time.

17 Admin can warn or ban any profile on the request of Student feedback or reviewer.

18 Admin can give responses to queries and mails.

19 Login
>19.1 User can login through credentials.

19.2 User can login through Facebook.

19.3 User can login through Google.

19.4 User can reset password through Forgot Password option after two-step verification process.

20 Notification tab

20.1 For asked questions.

20.2 For Online session request responses.

20.3 For Account related notification.

21 Email Notifications (can also be unsubscribed)

21.1 For two-step password verification.

21.2 For asked questions.

21.3 For Account or website related queries.

21.4 For payment details.

21.5 For new offers and packages.

22 System shall allow Expert to answer only in LaTeX Language.

23 Question Queue

23.1 All the Answers which are not present in Answer Bank should be sent to Question Queue to be answered by experts.

23.2 Question Queue should display Questions based on FIFO (First In First Out).

23.3 Question Queue must display a question to expert for viewing only for 30 seconds.

23.4 If it is chosen by expert to answer, then it should be marked as chosen and must not be displayed again to any other expert unless its answer is declined by reviewer.

24 Review Queue.

24.1 Review Queue should display Questions based on FIFO (First In First Out).

24.2 Review Queue must display a question to Reviewer for viewing only for 30 seconds.

24.3 If it is chosen by Reviewer to answer, then it should be marked as chosen and must not be displayed again to any other Reviewer.

25 System shall give 1-hour initial time to Expert for each Question solving and maximum extended time of 24-hours.

26 System shall restrict Experts to login through website only (not App).

27 Answer Bank

    27.1 Answer Bank should be maintained which stores Questions, their Subjects, and their answers which answered by expert and are approved by reviewer.

    27.2 Every Question should be searched first in Answer Bank automatically when user uploads any question and if not present then it should be sent to Question Queue.
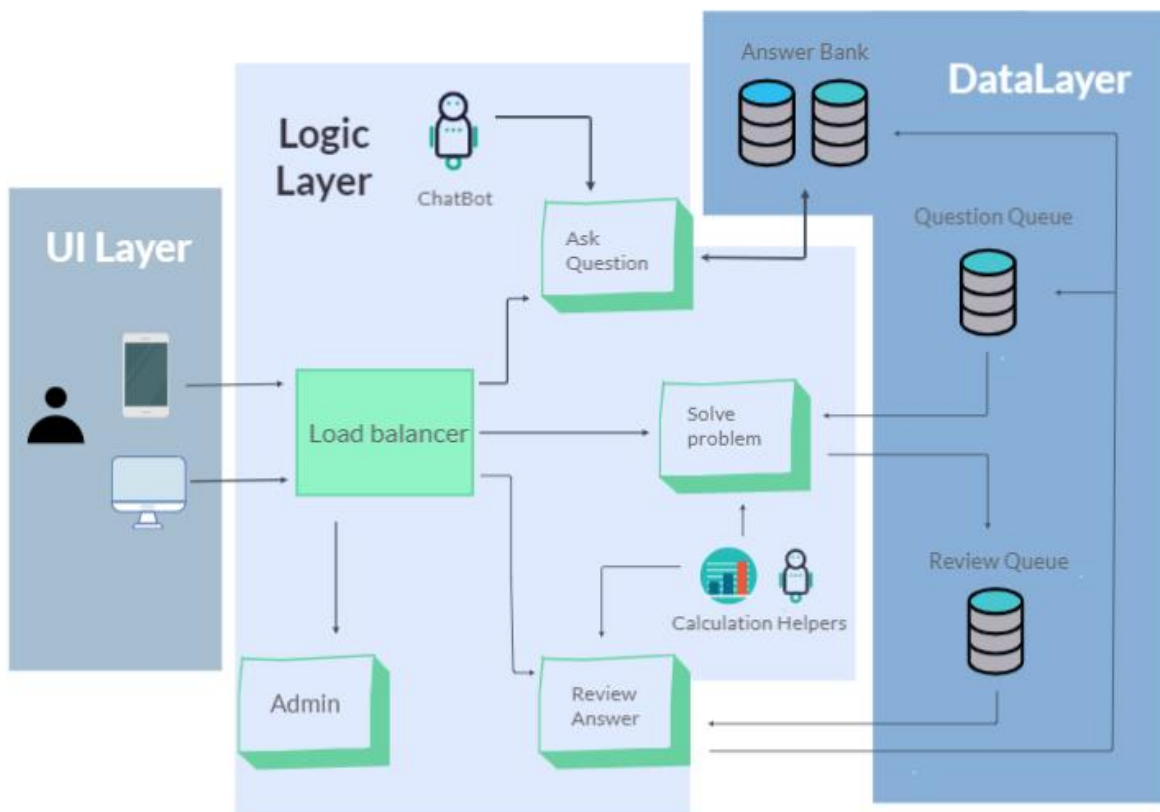
28 Load Manager

    28.1 There should be load manager based on FIFO (First In First Out) Manages Load

    28.2 All the Requests should be balanced through Load Manager.

29 All Data and Answer Bank should be Maintained in a third-party Encrypted DataBase.

6 Product Overview

Customer Benefit	Supporting Features
Convenient, flexible access to the system	Access through Website and App from Play Store and App Store
Secured access to the system	authentication, access control to the system
Scalable	System can to respond to 20,000 users simultaneously

7 Dependencies and Constraints

Security:

- Every User is logged in through Username and Password.
- CAPTCHA is used wile login and signup.

Usability:

- Navigation should be easy and have more remembrance.
- Chatbot should quickly answer frequently asked questions.

Responsiveness:

- It must be a single page application.
- Chatbot must answer any question within 1.5 seconds.
- AI problem solver and Graph generator should generate answers within 3 seconds.
- If there is answer of a question already present in Answer Bank, it should display it with 2 seconds.

Capacity:

- This system should have capability to respond to 20,000 users simultaneously.

8 Cost and Pricing

TBD

9 Licensing and Installation

As it's a website and app both, so everyone can access it online through website as well as by installing it on phone.

.