CODE GUIDE

Business Requirement Documentation

-BRD-

Introduction

Executive Summary

Code guide is a website service to everyone, especially people who Interested in programming. they face many problems while coding because they don't find the best function which executes Their target perfectly.

 it should offer millions of questions and answers about actual problems facing some users as a large question bank will be formed and it will increase incrementally by users' interaction.

it should offer the best online courses related to certain languages they want to learn and online problem solving tests so users can improve their skills .

It should provide experts' answers for questions asked by users using service " Ask a specialist" .

It allows users to create groups where they can discuss certain problem or work on a certain project

Document Overview

This document introduce code guide study plan. It introduce general description, technical description, development plan, operation plan, cost analysis and marketing study.

Business Objectives

- It offers easy and perfect answers in different Computer languages for each problem.
- It offers online courses for all Computer languages that you want to learn.
- It offers almost all tools which can help you with your problem Whatever is it.
- It offers "ask a specialist" service to get perfect answers to save the time of searching.
- You can connect with groups to share your knowledge and your experience with each other.

Background

Introduction

Coding is the ability to design, write, test, implement and maintain a computer program's source code. This code is written in a programming language, with its own syntax and meanings. In order to be able to code, you need to understand this language, and understand the way it works.

Today, Code powers our digital world. Every website, smartphone app, computer program, calculator and even microwave relies on code in order to operate. This makes coders the architects and builders of the digital age.

Coding isn't that easy, right? Many programmers (beginners-experts) face lots of problems and themselves many question like is my code clean enough? Is it easy to understand and change for other developers, or even for myself In the future? How does this function interact with other functions? Can it affect any of them in a bad way? Can it easily be used by other functions?and more problems while coding like When you make a change to a program, or you add a new feature, you run the risk of introducing new bugs into the program and when you write code which is duplicated in the program it can be hard to maintain and can introduce bugs and more problems they face thus programmers have many questions about where is the problem and the best way to solve this problem so CodeGuide solve all this ,So what is the CodeGuide?

CodeGuide is a website being developed especially to help programmers facing problems in programming languages field so to save their time and effort in searching for hours in online documentation and trying to fix problem by themselves, Codeguide society has millions of Questions & Answers about almost all computer languages and Programmers can easily reach the answer to their question and they can also improve their

coding skills as CodeGuide provides virtual problems assumed by moderators of website or tasks made by instructors in addition to links for the best online courses related to a certain language they want to improve themselves in it.

Survey

Q&A software is online software that attempts to answer questions asked by users (Q&A stands for "question and answer"). Q&A software is frequently integrated by large and specialist corporations and tends to be implemented as a community that allows users in similar fields to discuss questions and provide answers to common and specialist questions.

Q&A software is often provided to corporate and specialist sites, so the site and its users can be asked questions as well as provide or receive expert answers to them. This kind of software is particularly useful for responding to questions regarding specific industries. Users may learn by regularly answering questions or exchanging views with other industry specialists using the website.[3]

In the late 1990s, a free online service called Answer Point provided by Ask Jeeves, was launched, allowing users to ask questions and with the help of other people, have them answered. The slogan of the service, "The Ask Jeeves Answer Point is the place where you can ask and answer questions. Have a question? Post it! Know the answer? Post it! ", indicated the main function of it, which inspired the creation of later Q&A sites. The last archived version of the Ask Point was from late 2001 when it still allowed registration.

Since then, more and more sites have begun to offer Q&A services. Google launched its Q&A service called Google Questions and Answers in August

2001 which used Google staffers to answer questions by e-mail. A flat fee (US$3.00) was involved for an answer. In April 2002, Google launched Google Answers, which allowed users to post answers to questions, to replace its predecessor. Google Answers cost askers $2 to $200 for an accepted answer. By late December 2006, it was fully closed to new activity.

In early 2000s, Yahoo! launched its online Q&A service called Ask Yahoo!, which was later replaced by the beta version of Yahoo! Answers on December 8, 2005. Ask Yahoo! was discontinued in March 2006. Yahoo! Answers give members the chance to earn points, thus encouraging user participation. To support countries using non-English characters, Yahoo! Answers operate different platforms in some Asian countries, such as Yahoo! in Japan and as Yahoo! Knowledge in Korea, Taiwan, China, and Hong Kong.

in June 2009, Quora was founded, while the website was made available to the public on June 21, 2010. Users can collaborate by editing questions and suggesting edits to other users' answers.

From 2010 with the widespread use of smartphones and tablets, there is an increasing number of Q&A sites that decide to launch mobile applications. Popular Q&A sites like Yahoo! Answers and Quora have launched their own mobile applications. There is also a booming of new Q&A software such as Canvass which purely rely on mobile applications as their service channel.

Many different sites have focused on helping programmers either beginner or expert to solve their problems in codes can be represented as following:

SITEPOINT: SitePoint is a center for web developers to share their passion for making incredible things on the internet. It was made for web

professionals by web professionals and helps designers, developers, entrepreneurs, product creators, and programmers. Those who are looking for information can simply type in their keywords into the search box, and browse the articles available. The articles can then be sorted by category, and then by author. Additionally, users can search for their desired coding language simply by using the menu bar and it is all sorted neatly. This will include HTML and CSS, JavaScript, PHP, Ruby, Mobile, Design & UK, WordPress, Java, and more.

Quora[4]: is a question-and-answer website where questions are asked, answered, edited, and organized by its community of users in the form of opinions. Its publisher, Quora Inc., is based in Mountain View, California. The company was founded in June 2009, and the website was made available to the public on June 21, 2010. Users can collaborate by editing questions and suggesting edits to answers that have been submitted by other users.

Posts

User can interact with community by Posting his Question

- **Big text area**

  It is the area where the user can write his question or reply to others questions by commenting.

  Some of its features are listed below:-

  1. User can upload images & files related to his question.

2. User can include links.

3. Posts can be written in different fonts,styles,sizes & colors.

4. User can write the code that he wants to ask about in a specific area.

5. User can use tags to relate his question with specific topic.

6. Number of characters that user can type are limited to 600 characters.

- **Rating**

1. There are only postive rating.

2. The comments are rated by others and the answer that has the best rating will be marked as the best solution.

3. And the mark is a blue tick beside the comment.

4. Best rated comment will be put below the question so that other users searching for the same question can reach the best answer easily.

- **Profile**

Profile page includes basic information of the user:

1. Username (should be unique).

2. Password (should not be less than 12 characters and include at least one letter).

3. Profile Picture

4. It contains his posts.

5. A tab including all the website questions.

6. A dropdown box for notifications.

- **User Should**

1. Login first in order to post his question or reply to others questions.

2. Make his question specific & clear as much as possible.

3. Help people with their problems so that others can help you with your problems.

4. Consider that the number of characters does not exceed the limit.

Stack Overflow [1]

Stack Overflow is a privately held website, the flagship site of the Stack Exchange Network, created in 2008 by Jeff Atwood and Joel Spolsky. It features questions and answers on a wide range of topics in computer programming. It was created to be a more open alternative to earlier question and answer sites such as Experts-Exchange. The name for the website was chosen by voting in April 2008 by readers of Coding Horror, Atwood's popular programming blog.

The website serves as a platform for users to ask and answer questions, and, through membership and active participation, to vote questions and answers up or down and edit questions and answers in a fashion similar to a wiki or Digg. Users of Stack Overflow can earn reputation points and "badges"; for example, a person is awarded 10 reputation points for receiving an "up" vote on an answer given to a question and 5 points for the "up" vote of a question, and can receive badges for their valued contributions, which represents a kind of gamification of the traditional Q&A site. Users unlock new privileges with an increase in reputation like the ability to vote, comment, and even edit other people's posts. All user-generated content is licensed under a Creative Commons Attribute-ShareAlike license.

Stack Overflow only accepts questions about programming that are tightly focused on a specific problem. Questions of a broader nature–or those inviting answers that are inherently a matter of opinion– are usually rejected by the site's users, and marked as closed

Stack Overflow is written in C# using the ASP.NET MVC (Model-View-Controller) framework, and Microsoft SQL Server for the database and the Dapper object-relational mapper used for data access.

Stack Overflow Tour: Some of Stack Overflow's key features are listed below with brief description.

1. Ask questions, get answers without distractions

2. Tags

3. Reputation

4. Improving posts by editing or commenting

5. Badges

6. Jobs

7. Simplicity

8. Mobile-Friendly Design

9. Strict Moderation

10. Daily Community Involvement

11. Strong Leadership

Ask questions, get answers without distractions

Good answers are voted up and rise to the top.

The best answers show up first so that they are always easy to find.

The person who asked can mark one answer as "accepted".

Accepting doesn't mean it's the best answer, it just means that it worked for the person who asked.

Tags

All questions are tagged with their subject areas. Each can have up to 5 tags, since a question

might be related to several subjects.

Click any tag to see a list of questions with that tag, or go to the tag list to browse for topics that interest you.

Reputations

Your reputation score goes up when others vote up your questions, answers and edits.

As you earn reputation, you'll unlock new privileges like the ability to vote, comment, and even edit other people's posts.

At the highest levels, you'll have access to special moderation tools. You'll be able to work alongside our community moderators to keep the site focused and helpful.

Improving posts by editing or commenting

Our goal is to have the best answers to every question, so if you see questions or answers that can be improved, you can edit them.

Use edits to fix mistakes, improve formatting, or clarify the meaning of a post.

Use comments to ask for more information or clarify a question or answer. You can always comment on your own questions and answers. Once you earn 50 reputation, you can comment on anybody's post.

Badges

Badges are special achievements you earn for participating on the site. They come in three levels: bronze, silver, and gold.

Jobs

Stack Overflow Jobs is built with the mission of helping all developers find work they love. Just as we built Q&A to give developers a better way to find answers, Jobs is designed to give you better ways to find your dream job. Whether you are looking for a job today or just want to keep an eye out for the right opportunity, it's easy to get started and participate as you wish.

Simplicity

Stack Overflow uses a simple process. During registration, a person can use his or her pre-existing Google or Facebook account to sign up in addition to being able to sign up on the site in the conventional way. The registration process takes only a few seconds and is totally free. This reduces the barrier and converts a person interested in Stack Overflow to a registered Stack Overflow user in a matter of seconds. In addition to registration, asking and answering questions is also free. To make the process even simpler and ensure new users get the best from the platform, Stack Overflow has launched its Stack Overflow Tour.

System Description

CodeGuide

* Imagine a Website that have Millions of Q&A about almost all

    Computer languages & tools which can help you with your problem Whatever is it.

* CodeGuide has both materials of studying certain language and all Q&A about it.

* CodeGuide provides a fertile society where you can learn and communicate with a specialist about certain problem if you need to.

    * Teachers & there students will have a better chance to communicate with each other more freely among group created by them.

    * Also you can design your own profile and provide all your Personal and technical information .

* Also you can added all your previous skills and projects you have done.

Posts & New Feeds

CodeGuide has general section for posts & new feeds which are Q&A about _actual problems_ facing some users .

You can search for problem facing you in <u>search engine</u> of website then you will find Q&A about the problem facing you as it probably asked by someone else.

If you can't find an answer for your question in search results, you can _ask it by yourself_ and it will be answered very soon , you can also _ask a specialist_ directly if you have a premium account.

Language List :

This site offers its users the facility of learning programming languages through a different categories of various languages like (python, java , c, c++,php,...., etc) . it offers a brief knowledge of the chosen language

by user and also it shows all posts related to this language for user to know techniques and projects made by others . During programming, there might be problems faced by programmer so he can search for related posts in the language section in the site . Moreover for every language the site supports links for different online courses related to the language .

Interactive Groups:

following to the posts section that would be public , The user can create their own groups for a particular topics where others can join and has detailed debates between the users for any one who wants to get more knowledge .

Ask a specialist:

A service that allows you to contact experts for asking help or solving problems that faces you with perfect solution and with more explanation so you can increase your knowledge .

System Architecture

Code guide System provides the user with multiple of answers to the questions that may struggle with him for a lot of time ,also user can sign up and post his question if he couldn't find an answer to his question , also he can communicate with a specialist to help him in his problem ,or learn a group of various languages like : C ,C++, Python , Java , etc……….

This system consists of the following modules:

[1] Storage

[2] Data Processing

[3] Data Analytics

[4] Indexing

[5] General User Area

[6] User Area

[7] Specialists Area

[8] Questions Area

[9] Achievements

[10] Security

[11] Groups Area

[12] System Administration Area

Storage

Data processing	Data analytics	Indexing	security

User Area	General User Area	Questions Area	Groups Area	Specialists Area

Achievements and points system	System Administration Area

[1] Storage

CodeGuide uses different types of storages :

> . core storage for users' interactions.

> . system storage for system configuration and user information .

> . indexing storage to support text search engines.

> . core storage for questions and answers.

Core Storage uses "MariaDB" is an open source relational structured database management system (DBMS) that is a compatible drop-in replacement for the widely used MySQL database technology, Structured data has the advantage of being easily entered, stored, queried and analyzed. At one time, because of the high cost and performance limitations of storage, memory and processing, relational databases and spreadsheets using structured data were the only way to effectively manage data**.**

Archive storage uses JSON data format stored directly over distributed storage. JSON allow flexible access of data attributes. Distributed storage allow fast access of data items and offer expandable storage. Data replication is configured to minimum which full data availability and data recovery needs of archiving information.
System storage uses traditional structured database which provide better queries and data processing over structured contents.

[2]Data Processing

Data processing module is responsible on providing all data related services like data modeling and correction, data transformation, data classifier and multimedia processing.
Data transformation is required to allow import and export of different data format. The system
supports common data formats supported by common data processors applications.

Data is processed & analyzed before merging it to the database .

Sending & receiving data is done in Json encoding & ajax.

If the data(Answers) didn't satisfy our user we will direct him to "stackoverflow.com".

Data classifier is required to classify the contents which is important to avoid non-appropriate material.
The classifier uses information retrieved by data modeling services.

[3]Data Analytics

Our database is built incrementally according to user interaction , and data is analyzed into categories according to different languages ,so we need to make data analytics to help the user access the site faster and safer.

Similarity analysis to determine similar questions , and help in searching data for questions. This is important to avoid repeated database.

Security analysis to avoid corruption of database, as the data is analyzed before forwarding to the database.

Security for user profile to avoid any outsider to show its content.

[4]Indexing

This module is responsible on indexing textual contents to allow internal full text search queries. Full
text search is used by final users to find certain contents. Also, it used by other modules like data
processing to locate contents in a fixed time regardless the overall contents size.

[5]General User Area

This module provides user with main system activities like searching about questions generally or for a specific language, also there is questions in all languages or it can be in specific language and it will be ordered in the most recent , our offers of online courses will be shown to him , and about as section.

The general user can't make posts or write comments on other's questions or create & join groups with others or communicate with specialists without sign up and log in.

[6] User Area

This module provides user with all the activities that the website supports like

- Register as "member or specialist" .
- Post a question and write comments.
- Show his questions or all questions on the site.
- Show notifications icon on navigation bar –where he can follow his questions updates & any updates in groups-.
- Create & join groups to share knowledge with others and gain the experience of teamwork .
- User can connect to the online courses.
- User can use a paid service to ask a specialist about his problem.
- Achievements section where the user can earn points by answering some questions.
- Users can give rating for the comments on the posts
- Users can bookmark the important questions

[7] Specialist Area

This module provides specialist to sign up on site and answer the question asked by users for money and users can join in group with him and be in continuous contact with him.

User's questions appear on the home page for the specialist after signing in and he can show all users' questions.

Specialists can create groups with users to make a specific project where users can benefit from this group.

On the specialist profile there will be his rating which the users gave to him, the number of questions he had answered.

User's questions will be directed to the gmail of the specialists if they didn't open the website.

[8]Questions Area

The user decide which language he want to ask the question in or if he asking a general question ,then he can choose whether he can use a paid service like "Ask a specialist" or ask his question to the public , the user can type the question with limited number of characters.

Comments area will be under the questions area where every question will have his answers or as we call it "comments" under it so the user can see the question & its answer easily, the comment will show the name of his author.

The comments can be rated by the users, where the comment with the greatest number of ratings will be displayed first, while in the 1st the comments are ordered according to the date.

[9]Achievements and points system

Each user can collect points when he helps other users in comments as each comment has a rating , so for every helpful comment the user gets some points.

Points can be used as a credit in the website for asking a specialist.

If the points exceed than a certain level the user can be promoted to be a specialist so he can gain money from the website.

[10] Security

Security analysis to avoid corruption of database, as the data is analyzed before forwarding to the database.

Security for user profile to avoid any outsider to show its content.

Passwords will be encrypted before it will be assigned to the database .

Encryption for banking operation (required for "Ask a specialist" service).

[11] Groups Area

Groups is a section in the website where users can learn , communicate and work on project together so that users can learn how to work in a team by the interactions between them .

In groups you can make polls with the users with you in the group, ask them questions about the project you are working in or about something you are learning together.

A specialist can be added to the group to supervise the group activity.

[12] System Administration Area

User can send report if he found any inappropriate behavior from other users or specialists.

When report is received by the administrator, the complaint will be revised and an action will be taken.

System Features

Create Group Project

System offers Users to build their own Groups. Every group should have a main theme, idea or project. The users can add questions and set the expected answer through polls system. The admin user can control the group and who will enter that group.

The group specifications as follows

- System provide any number of questions in the group.
- System supports polls for users to help discussion.
- The polls are created by any users.
- Users can rate the questions and answers.
- Users can't access the group project question or posts unless they apply for it.

Groups can be created for multiple purposes such as Arranging and following projects and discussing certain ideas in specific field of coding.

User Rating

The system enables evaluation for every post and question. The evaluation based on the quality of the generated questions.

System trust the user's ability to do evaluation. Users may rate the question and the answers.

By time the rating helps other user to find most high rated question and high rated answers. That helps users to find their answers easily.

User Management

The system defines user management over the sites as follows

- Users must register to the system before they can post any questions, join groups or creating them.
- Users can review all posts and their answers without registration to the system.
- User can create any number of posts or groups in order to exchange information.

- User has a total control on his profile, editing or adding personal information.
- Users can construct the groups by two methods
  - Manually by adding participant's ids one by one.
  - Alternatively, users can construct empty groups and ask participants to join later.

Security

Systems provides security through various levels. Keeping privacy and contents safe as possible.

- User's password encryption
- Only user can view his profile and edit it
- Users need to ask permission to join a group and see its content
- Encryption for banking related to "ask specialist"

Ask Specialist

System helps their users to reach fast and accurate answers for their questions. That shall be done by the help of users as well.

System depends mainly on two individuals in this section, the users who ask question and the users who can be the specialists and give accurate answers.

This section is premium offer for the users who is willing to pay for fast and accurate information. It also gives opportunity for those who want to give their answers and be specialist to earn money.

Users have their usual accounts and they can apply to be specialists to help others and earn money.

The privacy and security of this section between the user and specialist is also offered by system.

Check for problem solution

CodeGuide main feature is providing answers for most problems that faced software engineers especially in beginning of their career.

You can filter inquires by language e.g. C++/C, C#, java, python, Php, Html, etc.

You can easily Search for problem (Question) facing you in Search bar after filtering by language.

Most frequently the problem facing you have been asked by someone else and answered, so you can easily go and search for whatever your question as we offer you :

- Questions similar to yours and its best answer rated by other users on site.
- No similar results
  - Ask your questions to Public.
  - Ask specialist
  - Go to stack over follow "if your question exists their".

Users can access option one without need to be having an account on CodeGuide,

But second option having account on CodeGuide is a must and Get Specialist Option needs

premium account, it will be discussed more clearly later on.

Also, the integration with Stack Over Flow will be discussed in details later on.

Generally Posts and New Feeds on CodeGuide are filtered by date (most recent come first),

Unless you filtered it in a different manner "like filtered by language". And you can access and

see all these posts as soon as you opened CodeGuide Website.

Accounts on CodeGuide

Users of CodeGuide are: Developers, teachers or students.

- Teachers or Instructors contribute to the system by Creating private groups to communicate with their own students in a better way and their they can upload subject materials and plans for whatever they working on.
- Developers contribute to the system either as specialists or they can volunteer to answer the Public
- Students can either be searching for certain inquiries, or participate in private groups created by their Instructors

You can add your Skills, Projects you have made …etc. to your profile which will give an expression on you and it will be available to public such that anyone interest on your profile could contact with you.

Also, users will need regular account:

- To ask a question to the public that make anyone could answer
- To answer questions of others
- Create a group if you want and added others where all of you can contact privately
- Rate answers on answers.
- Ask specialist where you can get a professional answer within 24 hours.

Examine

CodeGuide does not provide readymade exams, but it Provides links for exams from other sites that could help you to determine your level of understandability for certain languages at different levels.

Also, CodeGuide provides some important links for certain websites where you can grow your skills. One of these sites is Code Forces.

StackOver Flow Integration

Users Can access Stack Over Flow Site if there inquires not match any results on CodeGuide and they cannot afford Ask Specialist Option and really need fast response, at that case CodeGuide will provides link to connect Stack Over Flow and see if your inquiries found there or not.

Incremental Building of Question Bank

Each Entered Posts and Inquiries have been answered and rated as helpful provides the system with a chunk of questions and strong structure database. Users must agree to provide the copyrights of his/her questions and inquiries to the system. The system monitors the interaction between users and each other and students with instructor and so in order to improve the quality of our services.

The system saves the questions and posts at the global cloud database. For each question the system stores the question, the answer, the scientific topic, (instructor/students), (users/users) interaction and the modifications history. Based on that information, the system decides whether to publish this material or keep it for private usage.

User's interaction improves questions quality in many ways such as Feedback. Students claim may lead to a correction.

Some Users may claim that the scientific topic is incorrect. Also, Some Developer may claim that the scientific topic is incorrect and propose a correct one. The system analyzes all users' interactions and decide which questions to be published.

By time the questions database will grow rapidly and cover all software engineering topics.

Cross Platform Support

CodeGuide system is offered via web and mobile interface. The web interface allows responsive design support either desktop or mobile interface. Mobile application is offered for Android, iOS and windows mobile.

CodeGuide is not a Mobile application but it supports mobile interface, also it can be easily developed to be an android application (but we don't offer this service in that project).

System Development and Operation

Overview

The system development is performed using Agile methodology. Initial R&D activity should be applied to experiments tools and techniques. Later continuous R&D activity will run beside the system development activities. The first version of the system should take . After release, the system will enter an initial operation phase for three months. During that phase the whole development team will communicate directly with the operation and business team.

Later the system will enter the final operation and maintenance phase. During that phase a minor development team will provide an indirect technical support.

		1	2	3	4	5	6	7	8	9	10	11	12
Study Requirements		░	░										
Management Planning		░	░										
Preparation		░	░	░									
Test Planning					░	░							
Implementation					░	░	░	░	░	░			
Research					░	░	░	░	░	░			
Testing System					░	░	░	░	░	░			
Testing Final												░	░
Release													█

Operation Plan

Name	Task
Mohamed Erfan	-business analysis(system description) -website layout(prototype using diagrams) -Test Plan
Martin Joseph	-business analysis(system development) -website layout (prototype using front-end tools) -planning -Testing system and final testing
Mark Yousef	-business analysis(background) -website simple description(read.me on github) -Test Plan and research
Mario Hany	-business analysis(background) -website simple description(read.me on github) -Test Plan and research
Fatma Abdelmoniem	-business analysis(system architecture) -website layout(prototype using diagram) -implementation
Kareem Salah	-business analysis(system architecture) -planning -impementation
Omar Hesham	-management and planning -business analysis(system development) -implementation
Omar Nasr el deen	-prepare whitepaper -business analysis (system features) -implementation
Omar Mohamed	-prepare whitepaper -business analysis (system features) -implementation

Tools

CodeGuide will be developed using open source tools, languages and servers. Commercial tools will be used in case there is no open source alternative. This will decrease the cost especially for long term operation.

While development only online tools will be used for management, tracking, testing and source control.

This will increase the collaboration between team members even they are not located at the same place. Also, this will allow external teams and members to participate.

Operation	Recommended Tool
Source Control and Versioning	GitHub/Git
Structured Database	MySQL
Programming Languages	PHP
Operating Systems	Windows
Planning	Project Libre
Software SRS/SDA/SDD	Visio
UX Design	Adobe Photoshop ,Adobe Illustrator

Infrastructure

CodeGuide system requires multiple infrastructures for development and production.

Type	Name	#
Development and Testing Infrastructure	PC	4 Physical
	Online Development Server	(Virtual) 1 Server
	Local Backup Server	1 server
Initial Production Infrastructure	PC	4 Physical
	Online Production Server (Physical) 1Application Servers: XEON E7, 8 Cores, 128GB RAM, 1TB SSD 3 Data Servers (Master + 2 Slaves): Same with 1TB	1server
	Online Backup Storage	1TB

Cost

A)Development

b)Testing

c)Physical devices

d)Servers : starting from 50$ /month

e)experts fees for 'ask a specialist service' .

Assumptions

- The system completely depends on personal contribution of programmers to build the questions bank and problems they face in their career.

- The system completely depends on free open source tools and languages.

- The system provides online studying material. It contains an external links.

to other systems like w3schools.

-The system should provide the experts' answer within 24 hours.

Limitations

-Dependency on users' interaction.

-Some of the features are limited due to the database like posts and comments cannot exceed certain number of characters.

-At release a certain number of posts will be added to website to provide enough data to make the site usable.

-Dependency on other websites to provide online courses.

Risks

-The competition with other sites like stackoverflow.

-Depending on users where some of them don't have the enough experience so they may provide inaccurate answers.

-Attract users to the website when releasing.

-Dependency on other websites in some features.

-Few unessential features may not implemented.

Reference:

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