Web Programming SRS

for

Cram

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# Introduction

## Purpose

It’s an educational website that provides different courses that help students gain more knowledge and skills. And at the end u can quiz yourself.

## Product Scope

It’s a website that u can learn different courses such as database, networks, statistics, etc. and provides videos, materials and a little quiz at the end to test yourself and see your final grade. The website also provides a calendar with a to do list, so you can write the tasks that need to be done on this day.

# Overall Description

## Product Perspective

It’s a new website that eases the use and the way of providing courses, that help students to study and learn new things. Also, it includes things that motivate the students to study.

## Product Functions

### User Functions:

* Login
* Signup
* Browse courses.
* Enroll courses.
* Take Quizzes
* Create a to-do list.
* Create study session.

### Admin Function:

* Login
* Add Courses
* Add Questions
* Rate Courses

## User Classes and Characteristics

## Operating Environment

The operating environment for the website requires a good internet connection to open the videos and the materials and especially when you’re in the part that u reached the quiz part. It also requires a laptop to be compatible with the software parts and the laptop needs to be good and with good memory to handle all the data.

## User Documentation

* SRS
* Testing Documents
* Reports

# External Interface Requirements

## User Interfaces

3.1.1 Put user experience first:

Ensure that the website is user-friendly and easy to navigate. Speed is of the essence, the faster users can find relevant courses, the more likely they will have the urge to learn.

3.1.2 Be seen when people go looking (SEO: search engine optimization):

Optimize your website for search engines to increase visibility and attract more traffic.

3.1.3 Ensure accessibility:

Make sure your website is accessible to all users, including those with disabilities.

## Software Interfaces

The website is connected to a database for several reasons, to save in it the signup details for each user and be more secure and to save in it the to-do list tasks when new ones are added or edited, or mark as done.

# System Features

## Signup/Login Form

4.1.1 Description and Priority

It’s a form where you need to enter your personal data such as name, email, date of birth, password.

4.1.2 Stimulus/Response Sequences

When you open the website, the first thing you need to do is to signup if you don’t have an account. So, the form will appear, and it requires data to be entered. When you create an account, you will need to login to make sure the data is correct.

4.1.3 Functional Requirements

REQ-1: Signup Form

REQ-2: Login Form

## Homepage

4.2.1 Description and Priority

The homepage is where you find all the system features. It consists of a navigation bar at the top that contains the Courses, Calendar, About Us and Tips and Tricks.

4.2.2 Stimulus/Response Sequences

First you need to signup if u don’t have an account, if you have then u will directly login to the homepage where u have a navigation bar that has four options to choose from the courses, calendar, about us and tips and tricks.

4.2.3 Functional Requirements

REQ-1: Homepage

REQ-2: Navigation bar

## Courses

4.3.1 Description and Priority

Courses are the main feature of the system. You can search for a specific course and view its videos and materials and you can quiz yourself at the end of the course.

4.3.2 Stimulus/Response Sequences

First you need to signup if u don’t have an account, if you have then u will directly login to the homepage where u have four options to choose from and you will choose the course one. Then Plenty of different courses will appear and if you didn’t find what you want, you can search for it. Also, you can see all the materials and videos when u click on the course. At the end you will have a little quiz to quiz yourself and see your grades.

4.3.3 Functional Requirements

REQ-1: Course Page

REQ-2: List of Courses

REQ-3: Upload Materials

REQ-4: Upload Videos

REQ-5: Quiz Page

## TO-DO List with Pomodoro timer

4.4.1 Description and Priority

It’s a Calendar where you can use it to see where you started the course and how long it will take you to finish it. And we added a little feature where you can write your tasks that need to be done each day while you are already on the website, and it will be saved once you add a new thing.

4.4.2 Stimulus/Response Sequences

While you’re on the homepage, you will click on the calendar and after you will click on the day and a to do list will appear. You can add new tasks, edit the previous tasks and if you finish the task, you would make a tick beside it and automatically a line will be formed. This line indicates that this task is done.

4.4.3 Functional Requirements

REQ-1: Calendar Page

REQ-2: To-do list

REQ-3: Add Task

REQ-4: Edit Task

REQ-5: Mark done on Tasks.

REQ-6: Save Tasks

## About Us

4.5.1 Description and Priority

About Us is a page where it informs the user about all the features we have and how it works and most of all what’s the website is for.

4.5.2 Stimulus/Response Sequences

While you’re on the homepage, a paragraph with a header about us will appear or in the navigation bar you will click on about us and you will find all the details about the website.

4.5.3 Functional Requirements

REQ-1: About Us Page

## Contact Us Page

4.6.1 Description and Priority

Contact us is where u can communicate with the admin through mobile number or email address.

4.6.2 Stimulus/Response Sequences

After login into homepage, a drop-down menu will appear then we will click on contact us then the contact info will appear.

# Other Nonfunctional Requirements

## Performance Requirements:

## *Optimize images: Large images can slow down your website. Optimize your images by compressing them and reducing their file size.*

## *Minimize HTTP requests:* *Minimize the number of HTTP requests your website makes. This can be done by combining multiple CSS and JavaScript files into a single file.*

## *Use a content delivery network (CDN): A CDN can help improve the speed and performance of your website by caching content and delivering it from a server closer to the user.*

## *Minimize server response time: Minimize the time it takes for your server to respond to requests. This can be done by optimizing your database queries and reducing the size of your HTML, CSS, and JavaScript files.*

## *Use a caching plugin: A caching plugin can help improve the speed and performance of your website by caching content and reducing the number of requests made to your server.*

## Safety Requirements

Secure user data: Ensure that user data is secure by using encryption and other security measures. This will help prevent unauthorized access to user data.

Compliance with regulations: Ensure that your website complies with relevant regulations, such as data protection laws and accessibility standards.

Clear and concise terms and conditions: Provide clear and concise terms and conditions that outline the responsibilities of both the course provider and the user.

Accessibility: Make sure your website is accessible to all users, including those with disabilities.

## Security Requirements

Use strong passwords: Use strong passwords and password policies to ensure that user accounts are secure. This can be done by requiring users to use complex passwords and enforcing password expiration policies.

Implement two-factor authentication: Implement two-factor authentication to add an extra layer of security to user accounts. This can be done by requiring users to enter a code sent to their phone or email in addition to their password.

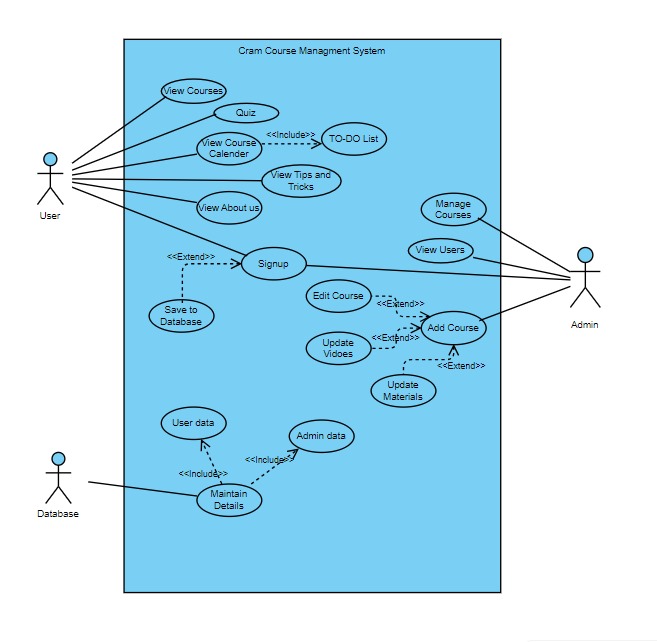
Regularly update software: Regularly update your website’s software to ensure that security vulnerabilities are patched. This can be done by using a content management system (CMS) that automatically updates software.

## Software Quality Attributes

Maintainability: Maintainability is the ease with which your website can be maintained and updated. A course provider website should be easy to maintain and update, with clear documentation and well-organized code.

Scalability: Scalability is the ability of your website to handle increased traffic and usage. A course provider website should be scalable and able to handle increased traffic without slowing down or crashing.

Reliability: Reliability is the ability of your website to perform consistently and without errors. A course provider website should be reliable and free from bugs or glitches.



A diagram of a computer

Description automatically generated