

Project Documentation: CSIT Solution Lite Demo Version Web App

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Project Name

- CSIT Solution Lite Demo Version Web App

Objective

- The primary objective of this project is to develop a lightweight web application using only JavaScript, HTML, and CSS. This application will help and serve as a resource for accessing solutions to the past questions for all semester of the BSc.CSIT program's Students.

Tech Stack Used or Requirements

- HTML5
- CSS3
- JavaScript
- Bootstrap
- GitHub account for version control and retrieving/storing images(URLs)

Description

Design Part

Header Part

- The header section is designed with CSS animations, presenting continuous information or notices that flow from left to right. The content emphasises that this is a Lite Demo Version of KEC's Solution for BSc.CSIT Semesters. It is also important to note that this app is not supported on mobile devices.

Middle Part or Main Dynamic Body Content

- This section has two primary functionalities:
 - A YouTube video player embedded to provide a tutorial on using the app, when the page gets loaded for the very first time.
 - User interaction with dynamic subject-specific past question solutions and shows the selected subject past year solutions as a headline, including options for navigation (next, prev), full-screen mode, and closing the content.

Left Part/Column

- This part greets the user with a welcome message. It also contains a header labeled "Solution Highlights" and displays images related to solution highlights. If the current slider image in the main content matches one of the images in this section, it gets outlined in red. Essentially, this section serves as an indicator for the main slider.

Right Part/Column

- The right part includes a menu with options for all subjects in the selected semester. Subjects with sub-items allow users to access past question solutions for specific years, such as 2078, 2076, and 2075 and so on. Additionally, this section provides access to the front and back covers of the solutions, as well as PDFs containing project documentation and algorithms that can be downloaded.

Footer Part

- The footer is designed to showcase the developer's information. Users can click on social media links/icons to connect with the developer. It is intended for users to provide feedback, seek advice, and make inquiries.

Coding Implementation Part

- The implementation of this project involves the utilisation of the following technologies and techniques:
 - Bootstrap for responsive design.
 - CSS3 animations for visual effects.
 - JavaScript, including both basic functions and asynchronous functions, for interactivity and content loading.
 - Manipulate CSS properties like `display: none` and `display: block` as needed.
 - Procedural programming and scripting techniques.
 - The use of the `async` and `defer` attributes in script tags.

User Help Section

- In this section, users can access various resources to assist them:
 - A sample tutorial video explaining how to use the CSIT app, published on YouTube.
 - Options to contact the developer via social media or email.
 - An informative section integrated into the app for user guidance.

App Motive Description

- The CSIT Solution Lite Demo Version Web App is constructed with specific attributes:
 - The app is not hosted on a backend server like Apache and relies solely on JavaScript, HTML, and CSS.
 - It demonstrates basic frontend development skills and JavaScript to create a simple yet effective application.
 - It exemplifies fetching content via URLs, simulating API calls, or data retrieval.
 - The primary objective is to provide free solutions to students of the semester of the CSIT program.
 - The project is kept lightweight and personal in nature.

Pros of App

- The app offers several advantages:
 - Ease of updating content by changing or replacing image URLs for different semesters and subjects.
 - User can just add the new folder with the specific year named and upload the subject images with indexed number for example if i have to upload the Computer Networks 2078 Past year solution I will only create a folder named Computer Network with specific year and upload specific image with name computer-network-1.jpg and so on....
 - Compatibility with various web browsers.
 - Provision of free educational solutions.
 - The code is publicly accessible, promoting transparency and collaboration.

Cons of App

- Despite its benefits, it has some limitations:
 - Potential performance issues that may result in slower loading times.
 - Not fully optimised, as it is designed to be a lightweight version.
 - Not compatible with mobile devices or smaller screens.

Conclusion

- In conclusion, the CSIT Solution Lite Demo Version Web App is a valuable educational resource created with simple frontend technologies. It aims to

provide students with free solutions to specific-semester questions while demonstrating the power of basic web development skills.

References

- Any external resources or references used in the project.
- <https://github.com/>
- <https://getbootstrap.com/>
- <https://cdnjs.com/>

Appendix

- FlowChart
https://www.canva.com/design/DAFxa3mjm7g/-Ts_WvnJ0_ikegQbgaaFbA/edit?utm_content=DAFxa3mjm7g&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton
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