IT 5443 - WEB DEVELOPMENT

<u>Project Milestone -3</u> <u>HTML/CSS/JAVASCRIPT/PHP</u>

PROJECT TITLE: CENTER FOR APPLIED RESEARCH IN INFORMATION TECHNOLOGY (CARIT)

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Overview:

The CARIT website project comprises PHP files, including index.php (home), aboutus.php (faculty), projects.php (projects), and opportunities.php (opportunities). These pages maintain consistent branding with PHP header and footer includes. The home page introduces CARIT, while the faculty page profiles faculty members. Projects.php showcases research initiatives, and opportunities.php details available positions. Application_form.php enables applications, processed by process_application.php. CSS and JavaScript files ensure a visually appealing and interactive user experience. Overall, the project offers comprehensive insight into CARIT's research, faculty, and opportunities.

LIVE PROJECT URL:

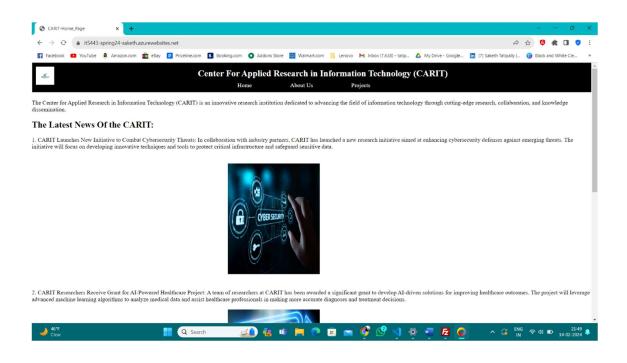
The Live Working Website URL is here, it5443-spring24-saketh.azurewebsites.net

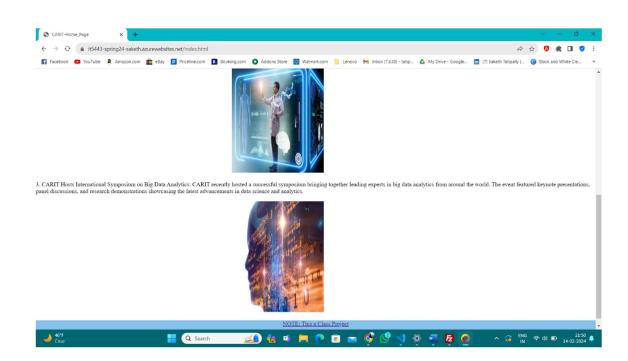
WEB PAGES SCREENSHOTS WITH EXPLANATIONS:

HOME_PAGE (index.php)

- ➤ The file starts with including the header.php file, which likely contains the header section of your website, including navigation links and branding and also footer.php which containes the footer section of the website, including necessary links or information.
- ➤ The home page features a brief description of CARIT, the latest news displayed using list tags, and proper use of ,
, and heading tags.
- The site footer includes a note indicating it's a class project with a link to http://it5443.azurewebsites.net.

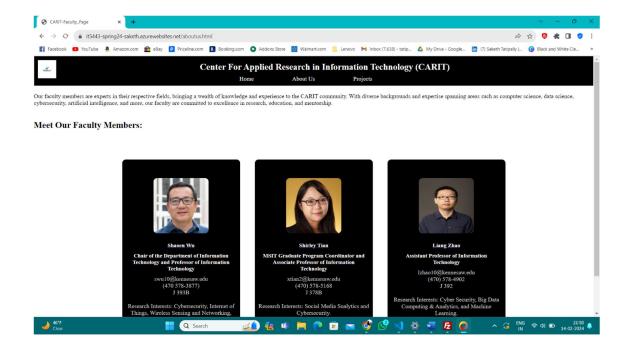
➤ Common contents such as the site title, logo linking to http://ccse.kennesaw.edu/it, and menu with hovering styles are displayed consistently.





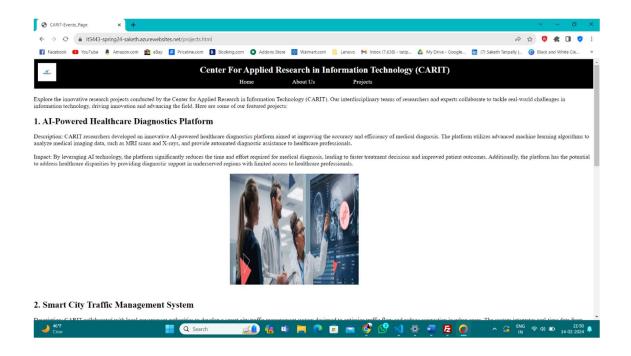
ABOUT US PAGE (aboutus.php):

- ➤ The aboutus.html page presents information about three faculty members, including their image, positions, research interests, and contact information.
- ➤ Each faculty member's name is clickable, linking to their personal websites.
- ➤ The common contents are displayed consistently, including the site title, logo, and menu with hovering styles.



PROJECTS PAGE (projects.php):

- ➤ The projects.html page showcases notable projects conducted by CARIT, with descriptions, images, and impacts.
- > The table tag is used for content organization as required.
- ➤ Common contents such as the site title, logo, and menu with hovering styles are consistent with other pages.





2. Smart City Traffic Management System

Description: CARIT collaborated with local government authorities to develop a smart city traffic management system designed to optimize traffic flow and reduce congestion in urban areas. The system integrates real-time data from traffic sensors, cameras, and GPS devices to dynamically adjust traffic signal timings and reroute vehicles based on current traffic conditions.

Impact: The implementation of the smart city traffic management system has led to significant improvements in traffic efficiency, reduced travel times, and decreased carbon emissions. By using data-driven insights and intelligent algorithms, the system helps cities better manage traffic flow, enhance road safety, and improve the overall quality of life for residents and commuters.



3. Cybersecurity Threat Intelligence Platform

Description: CARIT researchers developed a comprehensive cybersecurity threat intelligence platform to help organizations identify, analyze, and mitigate cyber threats more effectively. The platform aggregates and analyzes data from various sources, including network logs, security alerts, and threat intelligence feeds, to provide actionable insights and early warning indicators of potential security breaches.

Impact: By empowering organizations with actionable threat intelligence, the platform enables proactive threat detection and response, reducing the risk of cyber attacks and data breaches. The platform's advanced analytics and visualization capabilities enhance situational awareness and enable security teams to prioritize and respond to threats more efficiently, ultimately strengthening overall cybersecurity posture.





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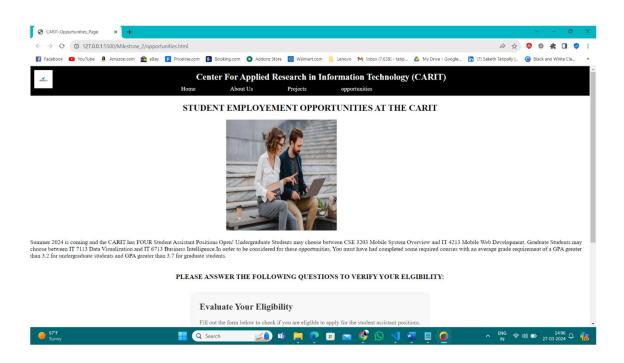


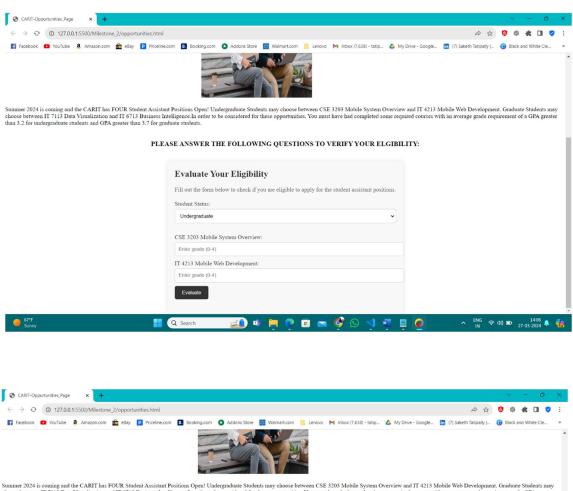
These projects showcase CARIT's commitment to leveraging advanced technologies and interdisciplinary research to address complex challenges in information technology and make meaningful contributions to society.

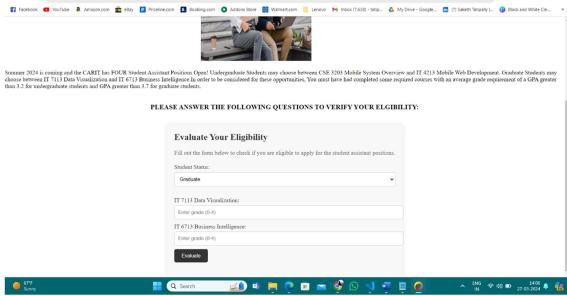


OPPORTUNITIES PAGE (Opportunities.php):

- ➤ "opportunities.html" is a webpage for CARIT, presenting student employment opportunities for Summer 2024. It includes eligibility criteria and a form for students to evaluate their eligibility based on their academic performance.
- > "opportunities.js" is a script that dynamically populates course options based on student status and evaluates eligibility based on entered grades, providing feedback on eligibility status.
- ➤ Common contents such as the site title, logo, and menu with hovering styles are consistent with other pages.





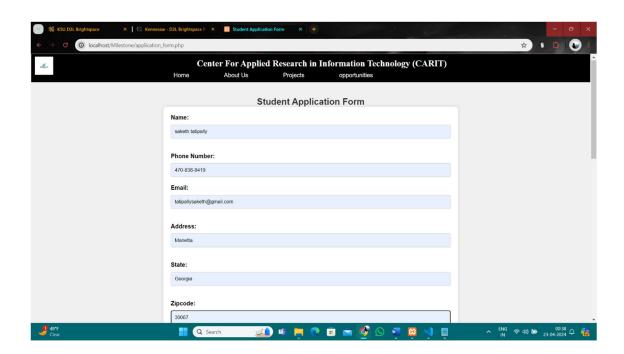


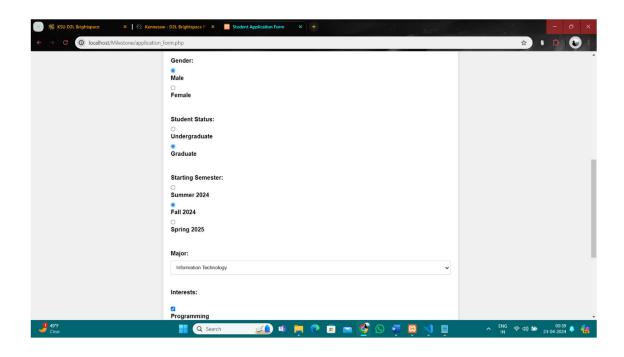
<u>Application form PAGE (application_form.php):</u>

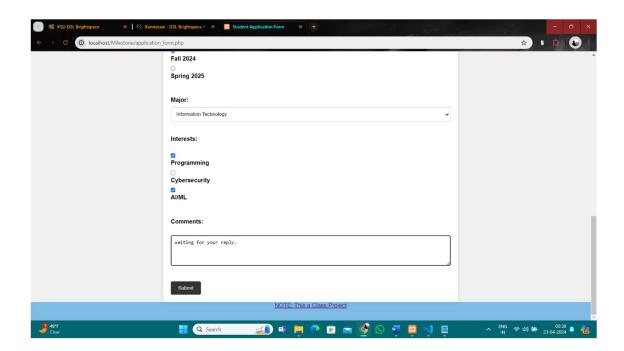
➤ Form Fields: The application_form.php file contains input fields for collecting essential information from applicants, including name, phone

number, email, address, student status, starting semester, major, interests, and comments.

- ➤ Validation: It includes client-side validation for ensuring data accuracy, such as checking phone number format, email validity, and required fields. Additionally, it utilizes JavaScript to validate grades entered for eligibility assessment.
- ➤ Submission Handling: Upon submission, the form data is sent to process_application.php for further processing. It also includes a section to display error messages if the form submission encounters any issues, ensuring a smooth user experience.

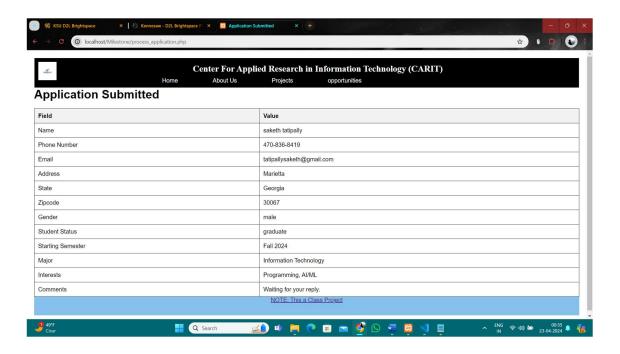






Process Application PAGE (process application.php):

- ➤ Data Display: process_application.php retrieves the form data submitted by applicants from the \$_POST superglobal and displays it in a structured format using HTML tables. Each field's label and corresponding value are presented in separate table rows for clarity.
- ➤ **Dynamic Content:** The PHP code within process_application.php dynamically generates HTML content based on the form data received. It utilizes PHP's isset() function to check if each form field has been submitted and displays the value if available, ensuring that only populated fields are shown.



REFERENCES:

- > Styles: CSS styles are defined in the index.css,application_form.css and process application.css files.
- ➤ Images: Images used in the website are referenced using relative paths, stored in the "img" subdirectory.
- ➤ JavaScript file(opportunities.js) implementing dynamic population of course options based on student status and evaluation of eligibility for student employment opportunities at CARIT.
- ➤ By adhering to the specified requirements and guidelines, the CARIT website effectively communicates information about the center, its faculty members, and projects, while maintaining a consistent and visually appealing design.