[Application Security]

S. Y. B. Tech Computer Engineering

Project 1 [BTECCE22402: Computer Graphics and Gaming]

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2023-2024

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PROBLEM STATEMENT:

- **DEPLOY YOUR WEBSITE.**

Introduction:
In today's digital age, establishing an online presence is essential for banks to reach a wider audience, provide convenient services, and stay competitive. GitHub, a leading platform for version control and collaboration, offers an excellent solution for deploying and managing the website of a global bank. Leveraging GitHub's features allows for streamlined development workflows, enhanced security measures, and efficient deployment strategies.

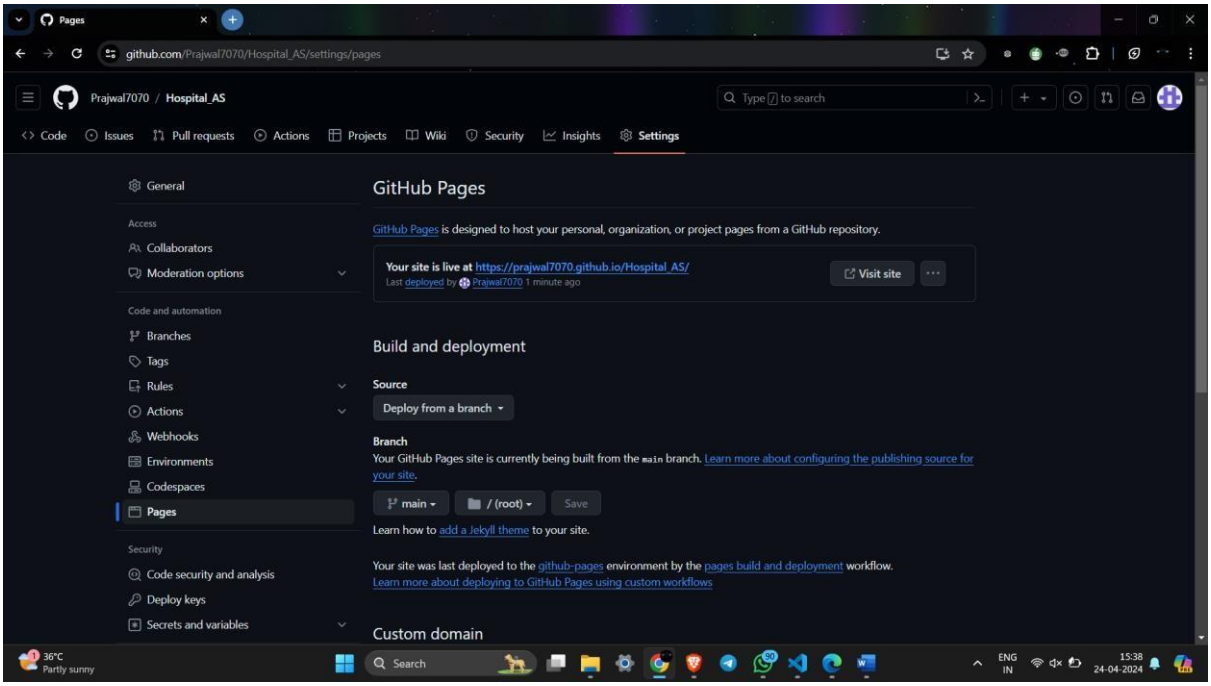
Overview:

Version Control: GitHub provides robust version control capabilities, allowing developers to track changes, manage branches, and collaborate seamlessly.
Security: With features like code scanning, dependency management, and vulnerability alerts, GitHub ensures the security of the website's codebase.

Continuous Integration/Continuous Deployment (CI/CD): GitHub Actions enables automated workflows for building, testing, and deploying the website, ensuring rapid and reliable deployment processes.
Collaboration: GitHub's collaborative features such as pull requests, code reviews, and project boards facilitate teamwork among developers, designers, and stakeholders.
Customization: GitHub Pages offers a simple and efficient way to host static websites directly from GitHub repositories, providing customization options and easy deployment.
Community Engagement: By leveraging GitHub's community features, such as discussions and issue tracking, the bank can engage with users, gather feedback, and address issues promptly.
Key Features:

Git Repository: Set up a repository on GitHub to store the website's source code, assets, and configuration files.
Branching Strategy: Implement a branching strategy (e.g., GitFlow) to manage feature development, hotfixes, and releases effectively. Code Quality: Utilize code review tools and integrations with code analysis services to maintain high code quality standards. Automation: Implement CI/CD pipelines using GitHub Actions to automate testing, building, and deployment processes.
Security Measures: Enable security features such as code scanning, dependency monitoring, and security advisories to identify and address vulnerabilities.
Documentation: Maintain comprehensive documentation to guide developers, contributors, and maintainers in understanding the project structure, setup, and workflow.
Monitoring and Analytics: Integrate monitoring tools and analytics services to track website performance, user engagement, and security metrics.

RESULTS:



CONCLUSION:

Deploying a global bank website on GitHub offers numerous advantages in terms of collaboration, security, and efficiency. By leveraging GitHub's features, the bank can establish a robust development workflow, ensure code quality and security, and streamline the deployment process. Moreover, GitHub provides a platform for fostering collaboration among team members and engaging with the community effectively. Overall, deploying the bank's website on GitHub sets the foundation for a scalable, secure, and user-friendly online presence.