Detailed Report on the Workshop on Git and GitHub

Organized by ISTE Student Chapter GJ-73

Sarvajanik University Sarvajanik College of Engineering & Technology Department of AI & Data Science

Event Date: 10th October 2024 **Venue:** Civil Computer Lab, SCET

Event Poster -

Introduction

On October 10, 2024, the ISTE Student Chapter GJ-73 at Sarvajanik University organized an insightful workshop on "Git and GitHub" in the Civil Computer Lab. The workshop aimed to equip students with essential knowledge of Git, a widely used version control system, and GitHub, a collaborative platform for software development. This event was a key initiative under the student chapter's mission to provide students with practical technical skills crucial for their academic and professional growth.

Objectives of the Workshop

The primary goals of the workshop were to:

- Introduce students to the fundamental concepts of version control using Git, a tool that helps track changes in source code.
- Familiarize participants with GitHub, a platform that facilitates collaborative work on code repositories.
- Provide an accessible learning experience for beginners while also offering deeper insights for those with some prior experience.

Faculty Coordinators

- **Vandana Shah Ma'am:** Vandana Shah Ma'am played a pivotal role as a faculty coordinator, providing expert guidance throughout the planning and execution of the event. Her deep understanding of the subject matter helped shape the content delivered during the workshop.
- **Mehali Ma'am:** Mehali Ma'am also served as a faculty coordinator, assisting in organizing the event logistics and ensuring a smooth flow of sessions.

Their collective efforts ensured the workshop's success and enriched the learning experience for the participants.

Student Coordinator

- **Tirth Parekh (1st Year, AI & Data Science):** Tirth Parekh, a first-year student, took charge as the student coordinator, overseeing the registration process, managing communication with participants, and ensuring that all necessary arrangements were in place. Tirth's proactive approach and dedication to his role were instrumental in the seamless execution of the event.

Detailed Event Description

The workshop was divided into two primary segments: an introduction to Git led by Vandana Shah Ma'am, followed by a practical session on managing GitHub accounts and repositories, conducted by Farshaz Master.

1. **Introduction to Git by Vandana Shah Ma'am:**
   Vandana Shah Ma'am opened the session with a comprehensive introduction to Git, a tool that enables developers to track and manage changes to source code. Her session covered:
   - **What is Git?**: An overview of Git, its importance in version control, and how it differs from other version control systems.
   - **Core Concepts of Git**: Explanation of repositories, branches, commits, and merges, with real-world examples to help students understand the use of these concepts in software development.
   - **Practical Demonstration**: A live demonstration on how to initialize a Git repository, add files, and make commits, providing participants with hands-on experience.
   - **Branching and Merging**: Emphasis on the importance of branching in team projects and how merging helps to consolidate changes. This part was particularly useful for students interested in collaborative projects.

   Vandana Ma'am's clear and structured presentation style made complex concepts accessible, allowing students to follow along with ease. Her use of relatable examples and scenarios from the industry helped participants grasp the practical applications of Git in real-world projects.
2. **GitHub Account Management and Repository Handling by Farshaz Master:**
   After the foundational knowledge provided by Vandana Ma'am, the session transitioned to a more practical focus with Farshaz Master taking over. Farshaz, known for his enthusiasm and expertise in using GitHub, guided the participants through:
   - **Setting Up a GitHub Account**: Step-by-step instructions on creating a GitHub account and customizing the profile for professional use.
   - **Creating and Managing Repositories**: Farshaz demonstrated how to create new repositories, manage repository settings, and use the GitHub interface efficiently.
   - **Collaborating on GitHub**: Emphasis on collaborative features such as forking repositories, making pull requests, and reviewing changes. Farshaz explained how these features make GitHub a powerful tool for team-based projects.
   - **Practical Examples**: Participants followed along with Farshaz's instructions, creating their repositories and practicing how to push changes to GitHub. This hands-on segment allowed them to see their work reflected in real time on the platform.

Farshaz Master's approachable and interactive teaching style made the session lively and engaging. He encouraged students to ask questions and offered personalized guidance during the hands-on exercises, ensuring that everyone kept up with the pace of the workshop.

Participation and Engagement

The event saw a strong turnout, with 40 students registering for the workshop. The participants were primarily from the AI & Data Science department and included students from other disciplines keen to learn about version control and collaborative coding practices.

- **Interactive Q&A Sessions**: Throughout the workshop, participants actively engaged with the speakers, asking questions and seeking clarifications on various aspects of Git and GitHub. This interaction added to the learning experience, allowing students to gain deeper insights into the tools.
- **Hands-on Practice**: The workshop included hands-on practice sessions, where students were able to work on their laptops and experiment with Git commands and GitHub functionalities as they were being demonstrated. This practical approach ensured that the participants could immediately apply what they learned.

Feedback and Impact

The feedback from participants was overwhelmingly positive. Many expressed their appreciation for the detailed explanations and practical demonstrations provided by both Vandana Shah Ma'am and Farshaz Master. The opportunity to work directly with the tools during the session helped students feel more confident in using Git and GitHub for their projects.

Some of the key takeaways mentioned by participants included:

- A better understanding of how Git helps in tracking code changes and managing different versions of a project.
- Knowledge of how to create and manage repositories on GitHub, making it easier to collaborate on group projects.
- Insights into best practices for using version control in software development.

Conclusion

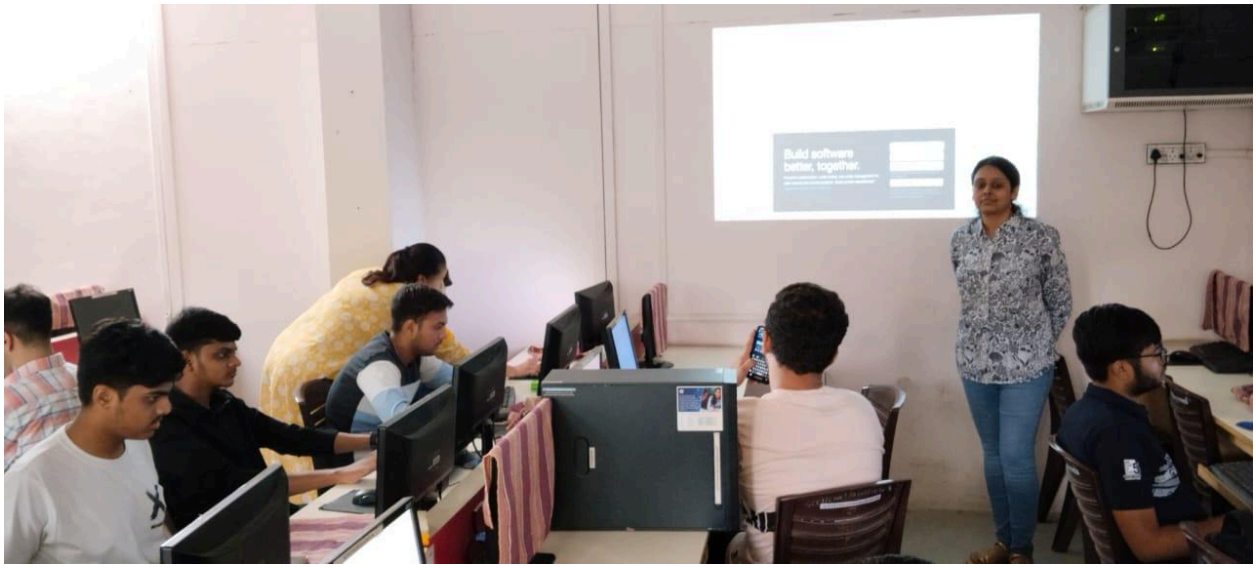
The Git and GitHub workshop organized by the ISTE Student Chapter GJ-73 was a resounding success, providing students with valuable technical skills that will aid them in their academic projects and future careers. The dedication and expertise of the faculty and student coordinators, combined with the active participation of students, made this workshop a memorable and enriching experience. It stands as a testament to Sarvajanik University's commitment to fostering practical learning opportunities and preparing students for the challenges of the ever-evolving tech industry.

We extend our sincere thanks to Vandana Shah Ma'am, Mehali Ma'am, and the ISTE Student Chapter for their efforts in making this workshop possible. Special appreciation goes to Tirth Parekh for his coordination and to Farshaz Master for his engaging session.

Glimpse of the event -

Git and Github
Understanding Version Control & Collaboration
GPS Map Camera
Surat,GJ,India
Athwa, Surat, 395001, GJ, India
Lat 21.182189, Long 72.805746
10/10/2024 03:23 PM GMT+05:30
Note : Captured by GPS Map Camera

that hosts Git repositories.
It facilitates collaboration by providing a centralized platform to manage code.
Features of GitHub:
Repository hosting
Pull requests
Issues and
Actions for
Differences
GitHub:
Git: Local version
GitHub: Cloud


Build software
better, together.