



Welcome to this session: Software Maintenance and Refactoring

The session will start shortly...

Questions? Drop them in the chat.
We'll have dedicated moderators
answering questions.





What is Safeguarding?

Safeguarding refers to actions and measures aimed at protecting the human rights of adults, particularly vulnerable individuals, from abuse, neglect, and harm.



To report a safeguarding concern reach out to us via email:
safeguarding@hyperiondev.com

Live Lecture Housekeeping:

- The use of disrespectful language is prohibited in the questions, this is a supportive, learning environment for all - please engage accordingly.
- No question is daft or silly - ask them!
- For all non-academic questions, please submit a query:
www.hyperiondev.com/support
- To report a safeguarding concern reach out to us via email:
safeguarding@hyperiondev.com
- If you are hearing impaired, please kindly use your computer's function through Google chrome to enable captions.



Stay Safe Series:

Mastering Online Safety One Week/step at a Time

While the digital world can be a wonderful place to make education and learning accessible to all, it is unfortunately also a space where harmful threats like online radicalisation, extremist propaganda, phishing scams, online blackmail and hackers can flourish.

As a component of this BootCamp the **Stay Safe Series** will/is designed to guide you through essential measures in order to protect yourself & your community from online dangers, whether they target your privacy, personal information or even attempt to manipulate your beliefs.

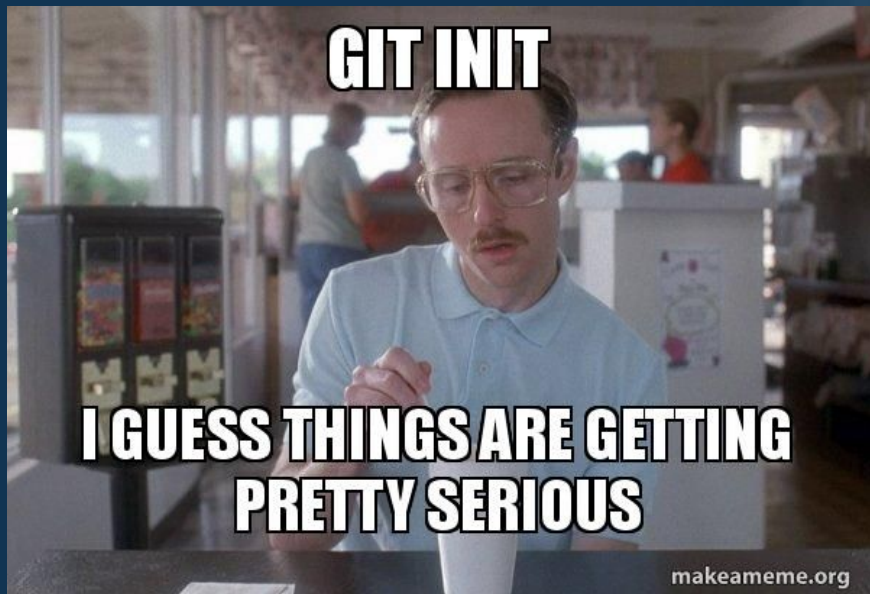
Security Reminder

Stay Vigilant and Practice Safe Habits

- Biggest security risk is often human error.
- Stay vigilant by following the basics
 - Never share your passwords
 - Double-check any suspicious links or emails
 - Avoid unknown public Wi-Fi networks without using a VPN.
 - Cybersecurity is as much about good habits as it is about technology.



Version Control



Learning Outcomes

- ❖ Define version control and its importance in Software.
- ❖ Explain the basic concepts of Git, including repositories, commits, and branches.
- ❖ Perform common Git operations.



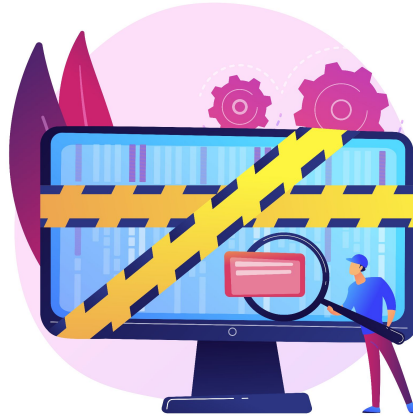
Software Engineering

How do you back-up the projects you are working on?



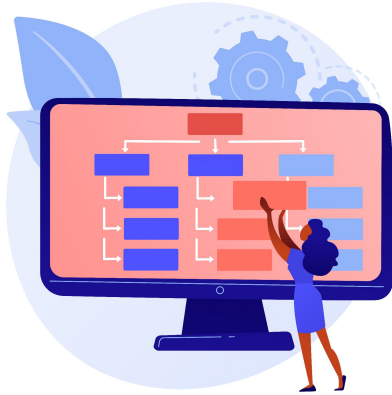
Version Control

Have you ever changed a program so much that you broke the code completely?



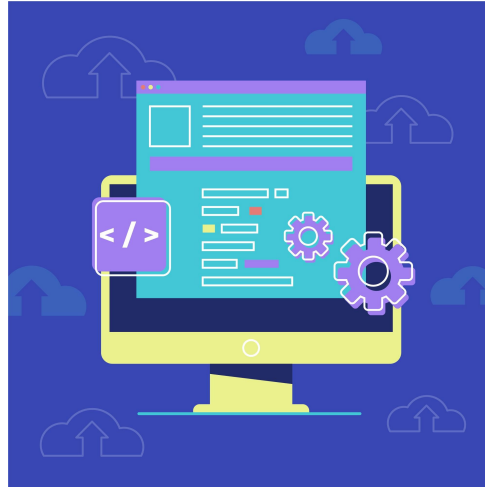
Version Control

- Used to track and manage different versions of our software.



Init

- Initialises a new git repository in the current directory.
- Command: 'git init'

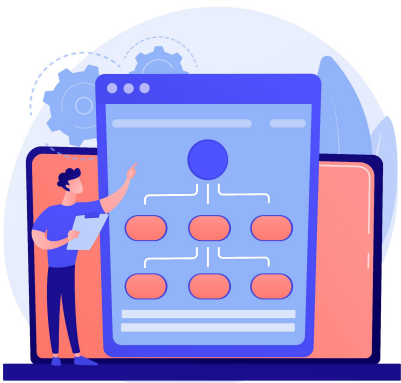


Tracking

- Files can be in 3 states
 - Modified or Untracked
 - Changes have been made to the file that won't be committed.
 - Files that have never been committed.
 - Staged
 - Files have been added to the staging area and changes will be saved on next commit.
 - Commit
 - Files have been committed to the repository and changes are saved.

Branching

- Allows us to create a copy of the main code to make changes and fix bugs without affecting the main code.



Merging

- Allows us to merge branches together to apply changes.



Stashing

- Stashes non-committed changes to allow us to switch to different branches.



Undo changes

- We can undo changes using 'git checkout' or 'git revert'
- We require the commit ID we would like to revert back to.



Polls

Please have a look at the poll notification and select an option.

What is the main purpose of version control?

- A. To delete unnecessary files from the project.
- B. To track changes and collaborate on code.
- C. To compile and run code efficiently.
- D. To create backups of your system files.

Polls

Please have a look at the poll notification and select an option.

What does the `git add` command do?

- A. Saves changes to a remote repository.
- B. Creates a new branch.
- C. Moves changes to the staging area.
- D. Deletes a file from the repository.

Q & A SECTION

**Please use this time to ask
any questions relating to the
topic, should you have any.**

**Thank you
for attending**



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