Agile videos:

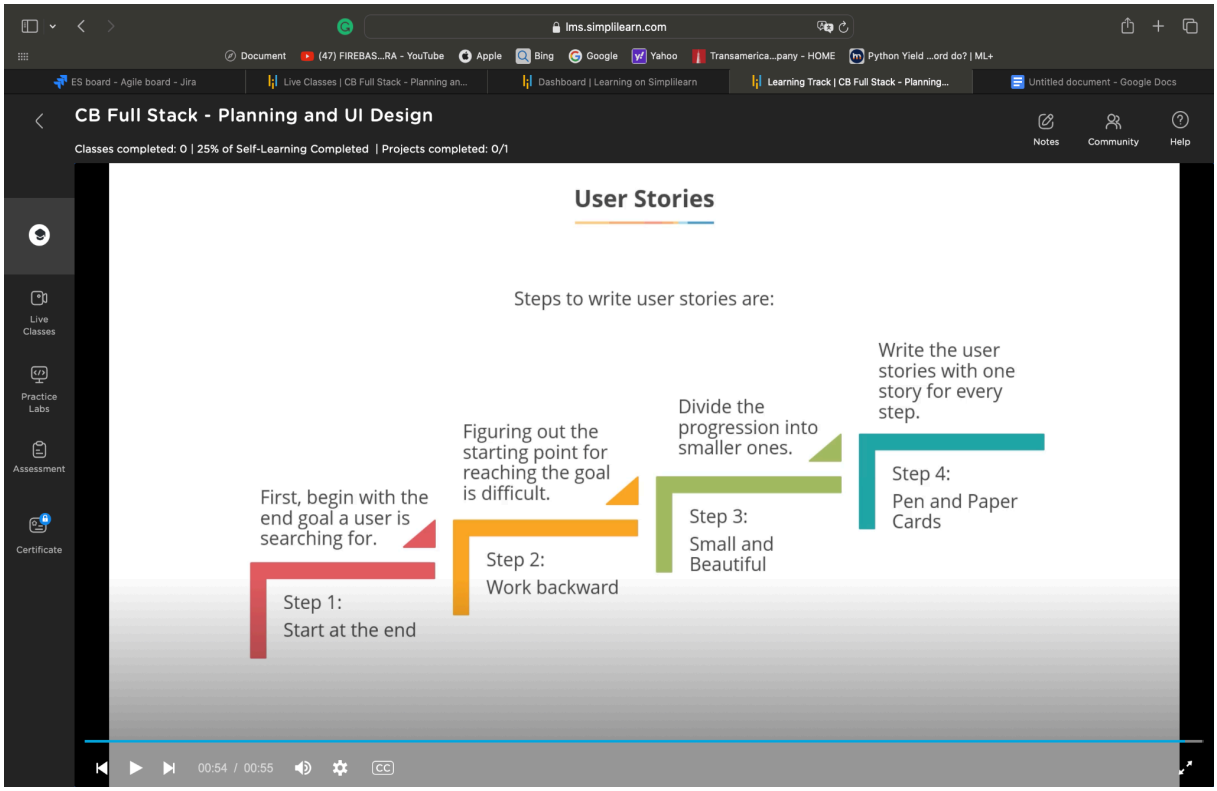
Helps deliver value to the customer
Scrum = is one of the most famous agile methodology
Agile manifesto = software 2001
Agile methodology = is a framework. Refers to a practice facilitating continuous improvement and testing throughout the project lifecycle.
10 months
Some methodologies include Scrum and Kanban processes.
Agile principal
Customer satisfaction
Chagrin requirement
In-time delivery
collaboration
Motivating team member
Exchange information
Measuring process
Manting a constant pace
Monitoring
simplicity
Self-organizing and independent team
benefits
Stakeholder and management
Collaboration between the team and project
Transparency (Features, meeting, and review meetings)
Predict delivery
Predict cost and schedule
Helps the the customer recognize the cost of every sprint
Facilitates changes
Focus on business value and meet customer expectations
User-centric helps with the feedback after completing the sprint
Enhances quality(helps the team focus on quality, testing, feedback implementation, and Overall collaboration)
Agile is beneficial for both the team and the customer
Helps schedule, cost, and scope
Challenges using agile
Roles and values
Scrum methodology
Is based on well-defined procedures and roles that should be included in the product development process

12 agile standard
Sprints = scrum are executed in blocks that are short and periodic referred to as sprints usually referred for 2 or 4 weeks
Sprint is a one-time boxed iteration of a continuo development cycle
Questing from the scrum master:
What did you do yesterday?
What do you plan to do today?
What is impeding their progress?
Scrum framework
Product owner
Examine the plan and the present vision to partners and clients
The product owner is the point of contact for the software development team
The product owner looks at the scope, budget, and time to set priorities as per the requirements and objectives
Bridge and communicator between stakeholders and the teams
Evaluate the product progress
Analyze and measure the progress
Conveys to the team whatever they go or move to the next stage of the development
The development team is responsible for executing the sprint(Planning, building, coordinating, and testing)
The development teams help formulate the objective goals of the sprint
The primary role of the development team is to execute sprint
Daily stand-up meetings a daily status meeting with the agile team(15 minutes)
The product owner, scrum master, and development team should be in the daily meeting.
Scrum master discusses the qa.
The sprint planning meeting is the first meeting for each sprint
Once the planning is complete, the scrum master should schedule the sprint review meeting
Sprint Retrospective 60 minutes
What are the good aspects of the sprint?
What are the bad aspects of the sprint?
What lessons did they learn from the sprint?
What can be done better in the next sprint?
Backlog refinement
Continuous interaction where the product owner and the development team work together
Aspects of a product will do and what it should not
Models, requirements, edge cases, and acknowledgment rules.
Jira walkthrough:

Kanban method:
Kaban acts as a visual method to visualize both the workflow and the assigned tasks within the process. (To-do, Wip, Done)
Kanban is used to identify obstacles at work and fix them for smooth work process flow at reasonable costs.
Involves continuous monitoring of the stages or process.
Kanban is used continually to improve the workflow or work process.
Kanban principles:
Increasing customer value
Reducing cycle time
improving the flow
Small gradual changes
Respect current roles and job title
Encourage acts of leadership with the team and organization
Core Practices of Kanban
1 Visualizing the workflow
2 Limiting work in progress(WIP)
3 manage the flow
4 making effective process guidelines
5 improving collaboratively and evolving
Feedback and improve your process
Scrum and Kanban complement each other.
Kanban is a process used to improve the existing process.
Keep the project in the right direction, improve the workflow, identify bottlenecks
Kanban kelps improve the current project
Kanban metrics = time value, crucial for generating business value, time to market.
CFD = time part of the graph , provides the required information on the team's performance
Lead time -> smooth -> wip
Process bottlenecks
swiftkanban
Scrum teams and artifacts
User stories short description to meet the requirements.
As a type of user
I want[an action]
User stories :
    1 independent entities
    2 negotiable
    3 valuable to the customer
    4 smaller

5 testable

Writing user stories



Product backlog ans sprint backlog
Working agreements
- Public and visible
- Collaborative
- Not imposed by anyone
- Small and easy to remember
- Updated frequently
- Consequential

Components of a working agreement:
Core hours
Daily stand-up
Cellphones
headphones
Product owner’s availability
opinion

guiderline
Informing absence
Grooming skills
Improving coding

Done and ready
History, capability, and framework
Creating user stories
Jira agile
Test case management -> agile software development
Agile software
Scrum methodology follow profiles and rules
Kaban is applied on the exits process

Git section:

Version control system = they refer to software designed to track and manage changes to a code
Reversibility = VPCto restore any point of the history of the source code , concurrency provides the ability to have many people work or modify the same set of documents, reflection adds new explanation.

Types of version control system = There are 2 version control system (CVCS)
Distributed or Decentralized Version Control System(DVCS).
DVCS where every developer has a copy of the project.

Helps in online collaboration, Allows for automatic branching and merging, development more dependable, reliable backup copies, merging and flexible branching
Helps in rapid feedback and fewer merge conflicts.
Provides the flexibility to work offline.

Git =Open-source and free distributed version manage system.Track the changes and updates.
Allows teams to work collaboratively.Provides implicit backup for data loss.uses a standard cryptographic hash function to identify objects.Branch management operation
Github provides internet hosting for software development and version control.

Version Control System	CVCS	DVCS
Repository	There is only one central repository which is the server.	Every user has a complete repository which is called local repository on their local computer.
Repository Access	Every user who needs to access the repository must be connected via network.	DVCS allows every user to work completely offline. But user need a network to share their repositories with other users.
Example of VCS Tools	Subversion, Perforce Revision Control System	Git, Mercurial, Bazaar, BitKeeper
Software Characteristics that suitable	i. Projects that allow only several users to contribute to the software development.	i. DVCS is suitable for a single or more developers because the project repository is distributed to all the

Global : Admin user of the operating system.
A machine's configuration is applied at the system level.

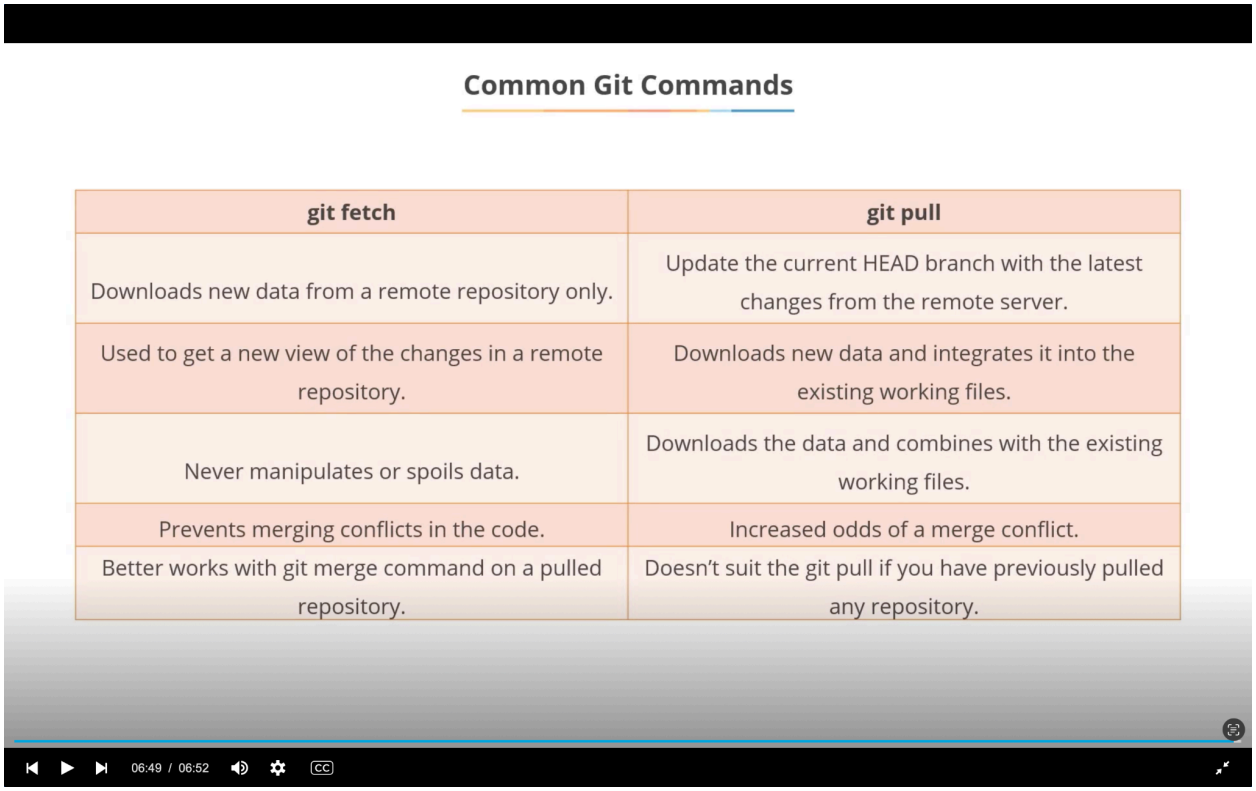
Configuration of git:

Git config –global user.name "luiscarlos2004"
Git config –global user.email "luiscarlosvaldivieso3@gmail.com"

Git init = starts new git project
Git clone = clones repositories
Git add = adds all the files to a staging area
Git commit = files are moved from the staging area to a loco repository
Git commit –amend -m "New changes" -> modify the last command instead create a new commit
Git remote remove <remote-name> -> removes from the local system.
Git push -> copies from local to the remote

There are more options available when using push -> <repository> <refspec> –all –prune –mirror –dry-run —tags –delete.

Git fetch -> helps download commits, items, and refs from other repositories.
Commits, items, and references from other repositories.
The git fetch command is used to grab updates from remote monitoring.



Branches are used to create, list, and delete branches in local repositories.
Master branch is the default in git.
There is only one master branch in the repository.
Git branch
Git branch -a

Creating a new brand
Git branch -d <branch name>
Git branch -D <branch name>

Moving to another branch
Git checkout <branch name>

Creating and moving to another branch
Git checkout -b <new-branch-name>

Branch naming convention
Regular branches permanently branches

Development(dev) -> is the main development branch only for developers to restrict developer making any changes on the master repository.(peer reviews, unit testing, and functional testing)(gets merged with the master branch).

Master(master) is the default available in the git repository(should be the most stable and updated branch all the time)(All the team members are responsible for keeping the master stable and up to date).

QA or test branch will be managed by the QA team and contains all the code for QA automation testing. Or changes required for QA testing. Before going to the production environment should go here to keep the code maintainable and stable.

Temporary branches can be created and deleted when needed
(BufFix, HotFix, FeatureBranches, Experimental Branches, WIPBranches)

Git merge -> consolidates the independent lines of development into a master branch
Git merge is used to join two Git branches and combine multiple commits.
The feature branch should be merged with the master branch
Update two branches for the merging

Fast-Forward Merge -> combine the commits
After a 3-way Merge -> 3 commits different as a alternative

To resolve merge conflicts, Git merge uses the edit/stage/commit workflow.

Git rebase -> is a process to reapply commits on top of another base trip
It is an alternative to git merge command
It is a linear process of merging
Helps to visualize the process in the feature branching workflow
Modify, Rewrite, Reorganize.
Can be used on the branch that is checked out
Git rebase <branch> <another branch>
Git rebase -i

Git squash -> Squash is used in git to compress preceding commits into one
It helps to test group-specific changes. Helps combine multiple commits.

Master
QaBranch
Develop

Feature

Git branch –list
Git branch -a = see local branches
Git branch -m <oldName> <newName> -> changing the branch name.
Git fetch –all = given all updates in the repository including branches
Git merge = copy by the branch
Git merge <branch name> = this copies all of the changes making on the branch

Pull request:
Helps to convey the changes made to a GitHub branch.
Pull request opened -> Review modifications -> Submit follow-ups.
When working on a shared repository, you can create pull requests and merge.
Is crucial to pass the required status checks before merging a branch into a branch.
Collaborator comment -> Approve the changes -> request more changes.
Review has 3 crucial stages : Comment(provide feedback), Approve, request(Everything needed before pull request).

When create a pull request create a branch myFeature to submit the pull request
Git rebase means reapply commits on the top

Sql and MySql Section

Mysql is a relational database system(RDBMS) that uses SQL to query from the database.
The database is used by companies to improve their business strategies and decisions.
A database system is a computer-based record-keeping system.
A database is a collection of structured data store

Databases allow us to pull, edit, and store data. Is used in backing, accounting, and finance.
Database software helps to create, edit, and maintain database files.
This database software is also known as a “Database management system” (DBMS).
Databases allow multiple users on various devices
Stores massive amounts of data
Allows multiple users can access it at a time
Handles large amounts of data with ease.

Types of databases
DBMS:
Relational database relational data model(data in tables and rows) every tabla in the database contains a key that differentiates data from others
Atomicity: will success or failed
Consistency: When data is modified, its value before and after the modification must be preserved.
Isolation: Ensured that more than one translation can occur concurrently.
Durability: Ensured that once it finishes the operation and finalizes the data, data must be permanent.
Operational database
Helps to create and edit the database in teal-time for handling different transactions

, Distributed,
Two types of databases
Homogeneous = Runs on the same operation system and uses the same process and hardware. This is a DDB is quit easy to manage
Heterogeneous: Runs on different operating systems with different processes.
Cloud:
Stores in a virtual environment
Offres different services such as PaaS, Haas, Saas
End User.
Hardware access.

MySql:
Enterprises need databases
Relational database management System(RDBMS) that uses SQL to query from the databases.
Mysql is a multi uses database means multiple uses can get access to the database at the same time.
Runs very fast

Provides multiple functionalities.
Is equipped with data types to support data.
Offers a standard 4gb per table.
Connectivity, localization, cost
Sql = is a standard technical language to store(Store, Retrieve, Manipulate)
Sql commands = Data Definition Language(DDL), Data Manipulation Language(DML), Transaction Control language(TCL), Session control, System Control.
Most use (Data Definition Language, Data Manipulation Language)
Data Definition Language(DDL)
Create, Alter, Drop, Rename.
Grant and revoke privileges and roles: grant or revoke permissions or privileges to work.
Maintenance commands: Analyze the table information.
DML(SELECT, LOCK table)
This command is not permanently saved.

Transaction Control Language (TCL)
Is used to manage and manipulate the data generated
These commands are used to manage changes that are made by DML commands.
Transaction Control Language(TCL)
commit, rollback, savepoint, set transaction.

MySql security and root superUser
Secure control
Authorization and controls

Root superuser
Admin who has the super privileges.
Blob or Text = helps to store large amounts of binary data.

The privileges granted to a MYSQL account help to identify operations a particular account can perform these privileges.

GRANT statement is to provide privileges to the user.

Sudo M -u root = runs on the superUser not require a password.

mysql -u root -p = requires the password

ORM

Object Relational Mapping: define the object in the application.

```
Create table Product(
        pid int,
        Name Varchar(256),
        Brand Varchar(256),
        Price int,
        Color Varchar(256),
)
```

Truncate table Customer = removes all the history from this table
Drop table customer = delete the table
Drop database customer = delete database

Alter table User add age int; = add a new column to the table
Alter table User drop column age; =drop the column from the table
Constrains = not null : when a person don't want to add the value
Unique = instead be not null
Primary key = the principal can't be duplicated or null
AUTO_INCREMENT = Keeps moving
When is no mandatory could be not null.
Describe user = shows all the values of the table.
ALTER is used to change the features of a database
MySql key = Unique key unique values, composite key two column ins a table where the columns are consolidated create, alter, primary key unique and not null values, foreign key is used to prevent actions that would impact connections between tables.
Foreign Key(Child Table) / Parent Key(Referenced or Parent Table)
Inner join = returns records that have the same values in both the tables.
Left Join = returns same records from the right table and all records from the left table
Right Join = returns the same records from the left table and all records from the right table.
Full join = all records when are the same.
Self join = regular join when the table is joined with itself.
SELECT column_name FROM table1, ,table2 WHERE condition;
UPDATE tablename SET column_name = values WHERE condition;
DELETE FROM User WHERE uid = 3; should always with the primary keys
SELECT * FROM User order by name;
SELECT * FROM User order by name ASC;
SELECT * FROM User order by name DESC;
SELECT COUNT(uid), city FROM User group by city;

SELECT * FROM User LIMIT 3;
SELECT MIN(age) AS minage, MAX(age) AS maxage FROM User;
SELECT * FROM User WHERE city IN (‘Delhi’, ‘Bangalore’)
SELECT * FROM User WHERE city NOT IN (‘Delhi’, ‘Bangalore’)
SELECT * FROM User WHERE age between 25 and 30;
SELECT * FROM User WHERE name LIKE ‘m%;
SELECT * FORM User WHERE name LIKE ‘j__%’ =starts in j with a minimum character of 3 next to.
SELECT * FROM User WHERE name LIKE ‘j%b’ = means one letter and another.

HTML Section

Provides easy way to display a web.
Html = 1991 is used to design web page content
Create web pages and web applications
A web page is a document written in HTML and viewed on the browser

The caption to a table = makes it more readable describes the data in the table.
<caption> Add details about the table
Merging cells :
Text wrapping: word-wrap: break-word; rapping the text.
Readability is influenced by the colors, icons, fonts, text alignment
Valign:” top”;

HTTP method
Get method
The button tag is used for control

DOCTYPES = Every HTML document starts with the doctype(rendests the web page) declaration to let know the browser is an HTML.
Author
Pragma
Expires

On the video tag can add this attribute(preload, controls, loop)

CSS Section

JavaScript

Angular

Cucumber