

TEAM Participation

Team Member Name	Participated?	How much? 100%, 75%, 50%, 25%, 0%
Daniel Nikolic	yes	100%
Ahmad Alramahi	yes	100%
Abdalla Abdelrahman	yes	100%
Hayden Sellars	yes	100%

Q1. What are the two big reasons that a software version control system is needed?

- 1) Maintaining Backups
- 2) concurrent Development

Q2. What are the three areas in the local repository?

- 1) Working Directory
- 2) Index / stage
- 3) Local History

Q3) How do you list the "entities" in each of the above three areas (from Q2)?

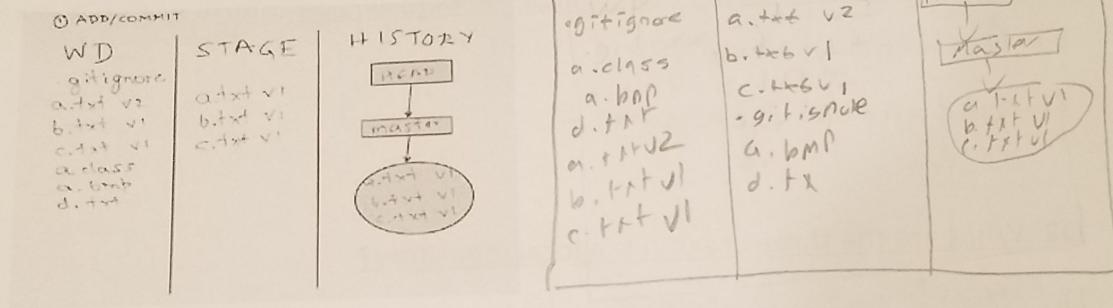
- 1) ls -r (find.)
- 2) git ls-files
- 3) git log

Q4) Why is having the proper ".gitignore" file so important?

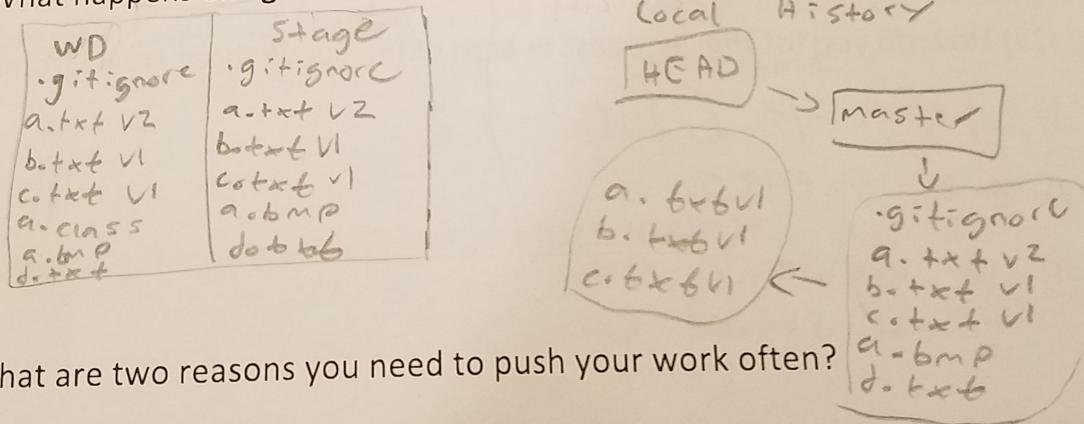
If you don't want specific files to be captured by the commit, you would add it to the .gitignore. For example, local settings such as class files generated from an IDE.

Q5) What is a commit object? Describe in a few sentences.
 It is a snapshot of the folders/files. It has an identifier
 and you can add a message to the snapshot. It states
 the date of commit and author as well.

Q6) What happens after a "git add ." operation? Draw the result (on the right hand side).



Q7) What happens on "git commit" command made after Q6. Draw the end result.



Q8) What are two reasons you need to push your work often?

Maintaining Backups of previous commits

and getting used to a concurrent

development.

To avoid conflicts. and to get help.

Q9) Fill in the below table

COMMAND	Changes WD (T/F)?	Changes Index (T/F)?	Changes Local History (T/F)?	Changes Global History (T/F)?
add	F	T	F	F
commit	F	F	T	F
checkout -- filename	T	F	F	F
checkout branchname	T	T	F	F

Q10) Undo Operations

- a) How will you undo changes to a file in the stage?

git reset Head~1

- b) How will you undo changes to a file in the WD (i.e. back to the last add)?

git reset FileName

Q11) What is HEAD? What is HEAD~1? What is HEAD~2?

Head is a pointer to the latest snapshot.

Head~1 is second latest and Head~2 is 3rd latest.

Q12) How will you find what are all the differences between the working directory and a branch?

git diff HEAD