

Unix and Linux

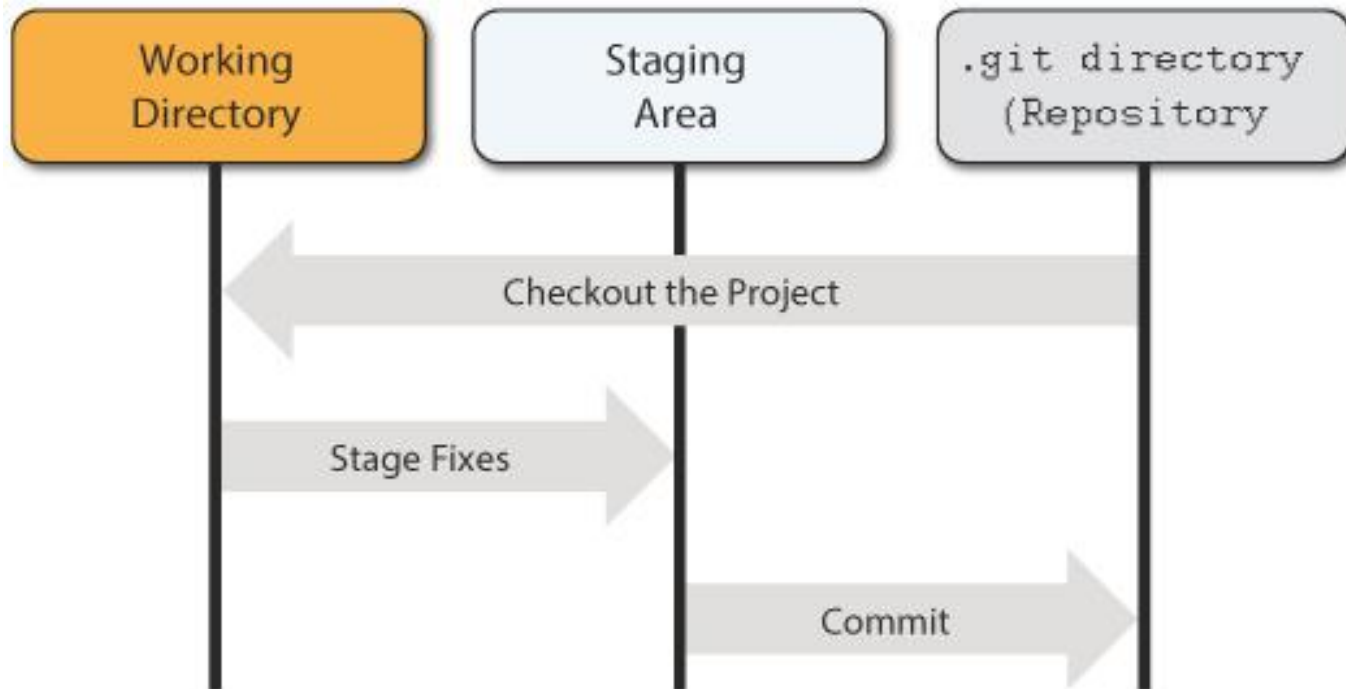
Still More Git and Github

Review of Git Basics

To get a copy of a project from a Git repository, you use a process called cloning. Cloning doesn't just create a copy of all the files from the repository; it actually performs three primary functions:

- Creates a local repository of the project under the `project_name/.git` directory in your home directory. The files of the project in this location are considered to be “checked out” from the central repository.
- Creates a directory where you can directly see the files. This is called the working area. Changes made in the working area are not immediately version controlled.
- Creates a staging area. The staging area is designed to store changes to files before you commit them to the local repository.

Git Stages



The cars.sh script

The next (and last!) programming assignment is to create a bash script named “cars.sh” that will help the user maintain an inventory of old cars.

The user will be presented with a menu of three options.

The user can

- Add a car
- List the cars in the inventory file
- Quit the program

Instructions for the cars.sh project

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- Login to your github account and create a new repository named “cars” in your personal account
 - Be sure to include a README.md file in the repository
- Clone your repository to your computer
- Change into the repository directory and
 - Create a file named “My_old_cars” that contains the following lines:

```
1948:Ford:sedan
1952:Chevrolet:coupe
1960:Ford:Mustang
1972:Chevrolet:Corvette
1977:Plymouth:Roadrunner
```
 - create a new script named `cars.sh`
- The first line of the script should be `#!/bin/bash`
- The second line should be a comment with the name of the script
- The third line should be a comment with your name
- Use a while loop to present the choices until the user chooses to Quit

Instructions for the cars.sh project

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In the while loop

Use echo statements to present the menu to the user

Use a case statement to process the choices

If the user chooses to enter a car:

Ask separately for the

Year

Make

Model

Combine these values into a single string with the values separated by colons (:) and append it to the My_old_cars file

If the user chooses to list the cars

Display the lines of the My_old_cars file sorted by year

If the user chooses to Quit

Display a “Goodbye” message and exit the while loop

Save the edited script

Instructions for the cars.sh project

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- Edit the README.md file to contain a description of the program
 - Include some of the markdown featured described in the “Markdown Syntax” handout
- Add `cars.sh`, `README.md` and `My_old_cars` to your staging area
- Commit the changes to your local repository
- Push your updated local repository to github.
- Post a link to your github cars repository on Blackboard

Extra Credit

- Extra Credit if you can replace the colons with spaces when you display the list of cars.

Review quiz

When you have created and successfully tested the `cars.sh` script, pushed your changes to github, and posted the link in Blackboard, take the Review Quiz as many times as you can.