

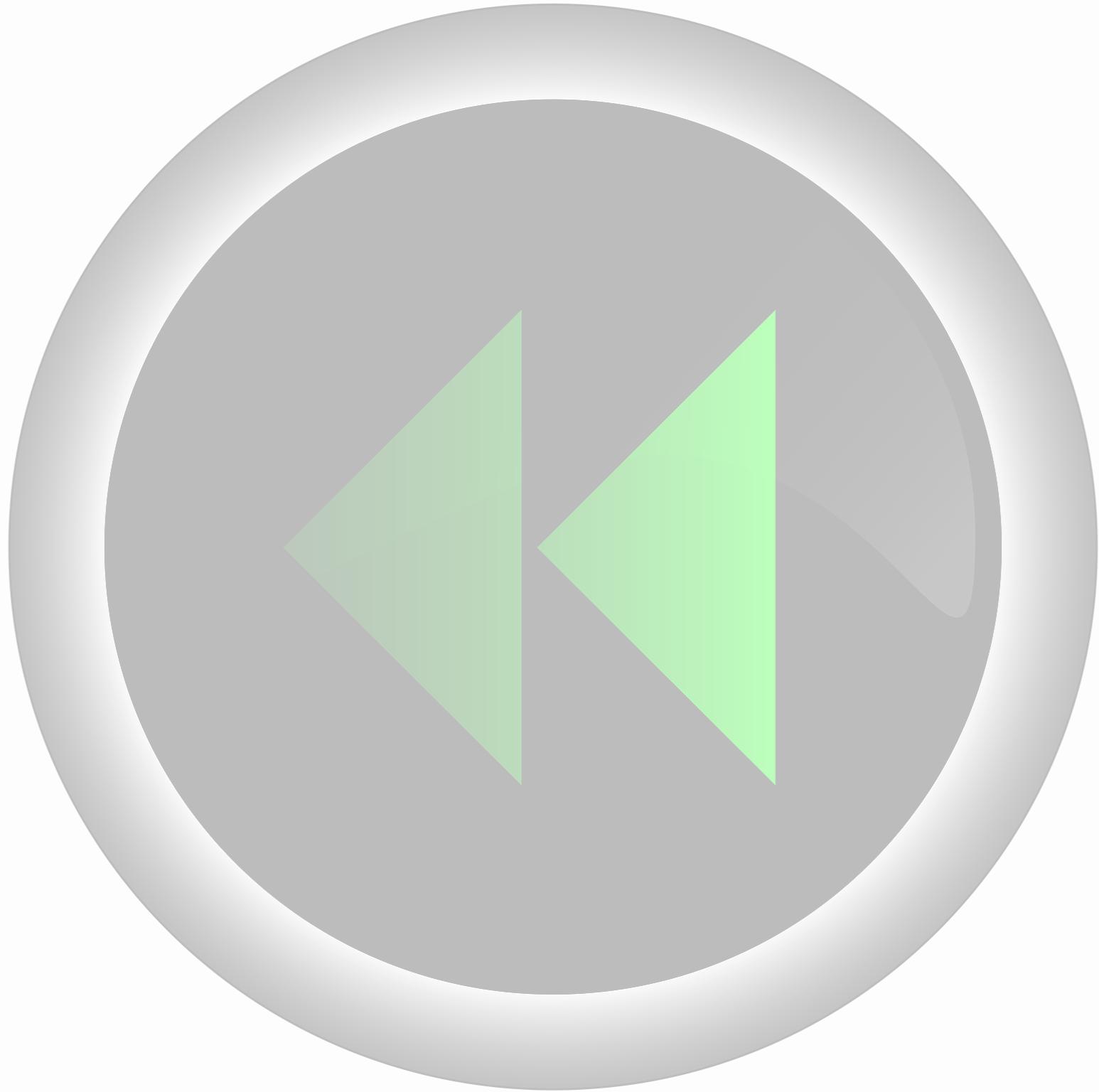
# Git

# Objectives

- Discuss what a Version Control System is
- Describe how Git works
- Initialize a git repository with `git init`
- Check the status of changed files in a git repository with `git status`
- Stage and Commit files

# Version Control System

Version control allows developers to revert back to a specific time and place in your code... sort of like a reset button.



# Git is the Solution

Git is a Version Control System. Any files tracked by git typically go through 3 stages:

Unstaged

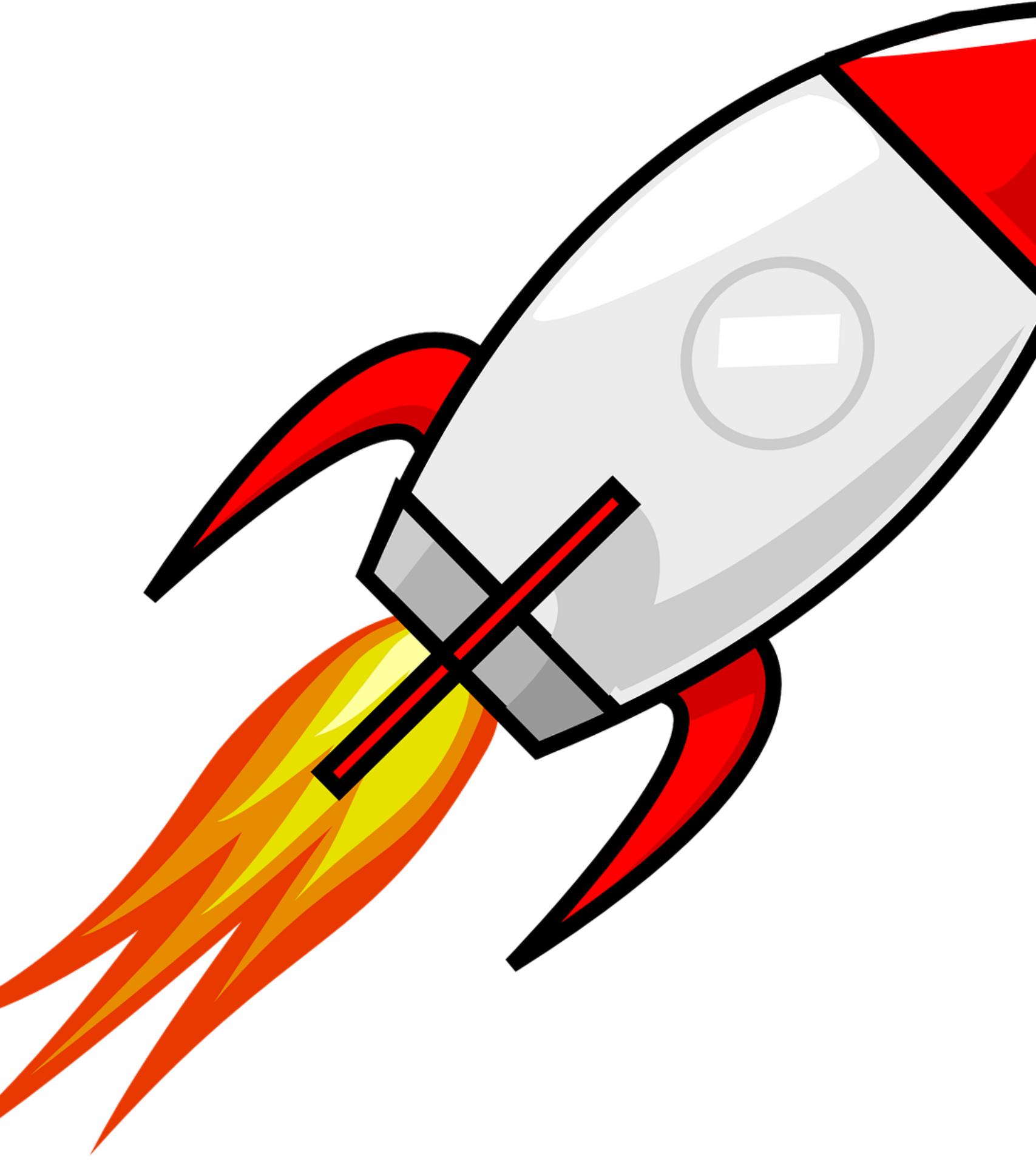
Staged

Committed

git init

git status

git add



git commit



# Let's Put it All Together

- git init
- git status
- git add -a
- git commit -m "complete the lesson"

.git directory



# Check for Understanding

**BREAK**

# GitHub

# Objectives

- Discuss the difference between Git and GitHub
- Connect Git and GitHub
- Explain what a remote is
- Push and Pull from GitHub

# What is GitHub?

GitHub acts as a remote backup service for git repositories.

# Connect Git and GitHub

```
git remote add origin git@github.com:nasa/marooned-  
astronaut.git
```



What is a remote and how do you see it/  
them?

git remote -v

# Send the files to GitHub

```
git push -u origin master
```



# Get updates from GitHub

```
git pull origin master
```

# Demo Time

# Connecting Git and GitHub

## Demo Objectives

- Create a new repository on GitHub
- Bring an existing GitHub repository to your local machine
  - Fork and clone
  - Clone
- Connect a Git and GitHub repository

**BREAK**

# Learning Strategy

## Jigsaw classroom

- You will have a home group
- Each person will choose a topic
- Go to the expert group to discuss/explore the topic and come up with talking points to bring back to your home group
- Come back to home group and you will get 2 minutes to share your new expertise

# Topics

- git remote rm
- git stash
- git checkout -b branch\_name
- git log