GIT

Created Date : 01/08/2023
Created By : GOVE ACADEMY

Version History

S. No	Revision Date	Version	Modifications	Modified By

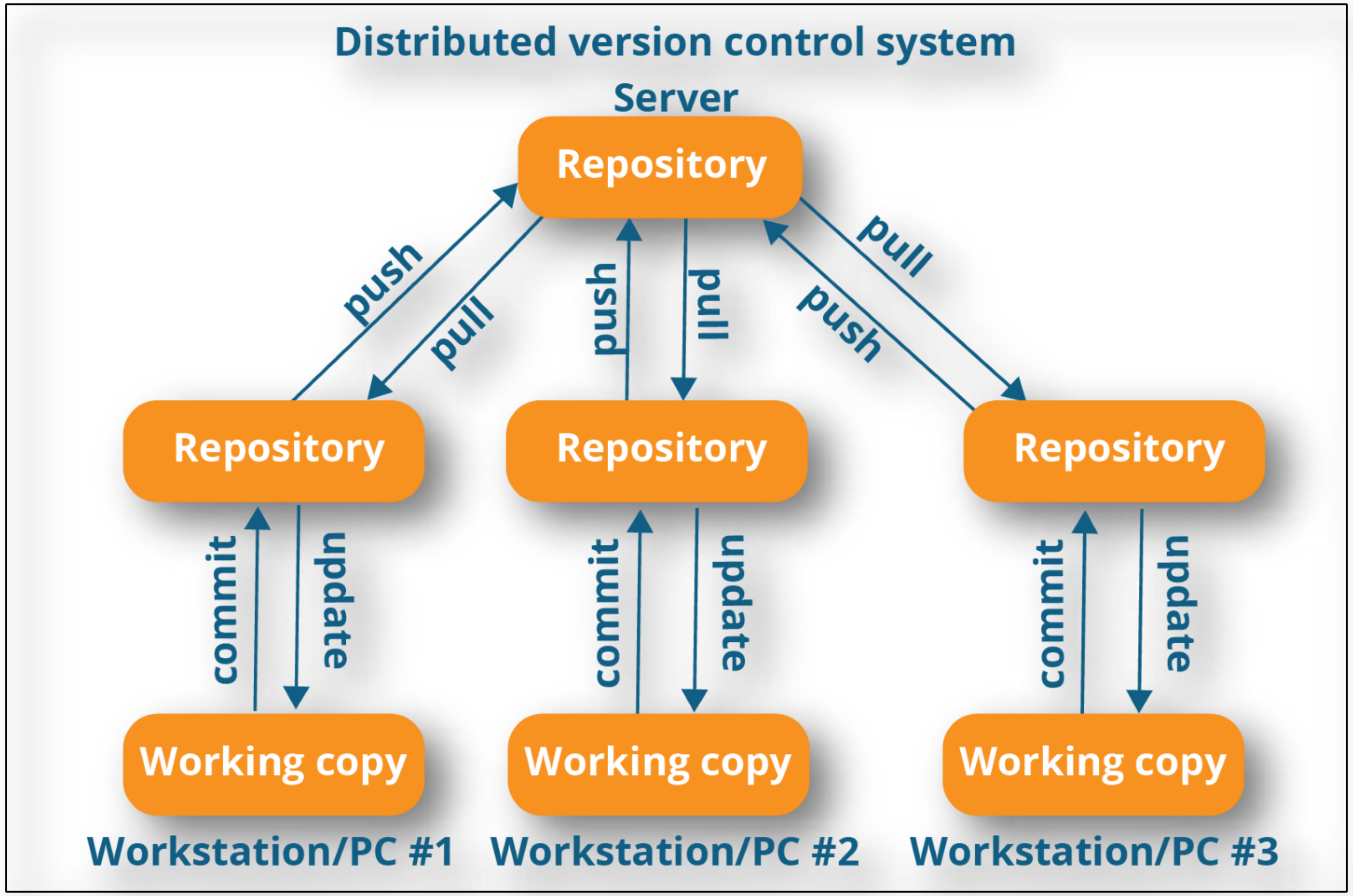
What is Global Information Tracker?

- ❑ Git is one of the Version Control System
- ❑ Meta data can be tracked by this version control system.
- ❑ Software team track changes to the code
- ❑ Simple way to develop the software
- ❑ Sharing to entire Software Team

Uses of GIT

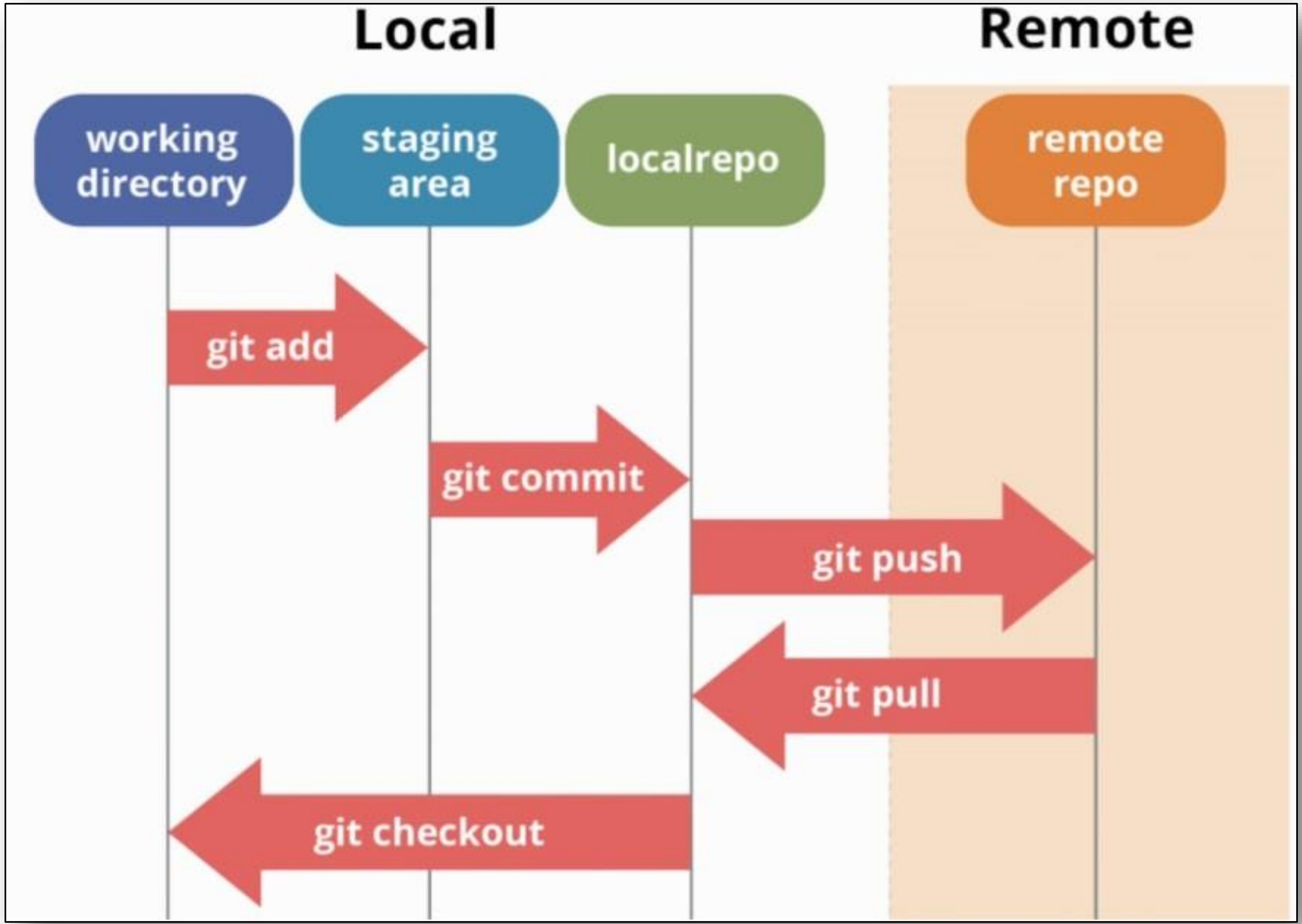
- ❑ Team can review, Command and improve.
- ❑ Make changes and merge commit faster
- ❑ Help software teams manage changes to source code.
- ❑ Record changes to a file.
- ❑ Multiple developer works on source code independently.

Distributed Version control system



1. Compatible with all Operating systems.
2. Language used in GIT is C

GIT workflow

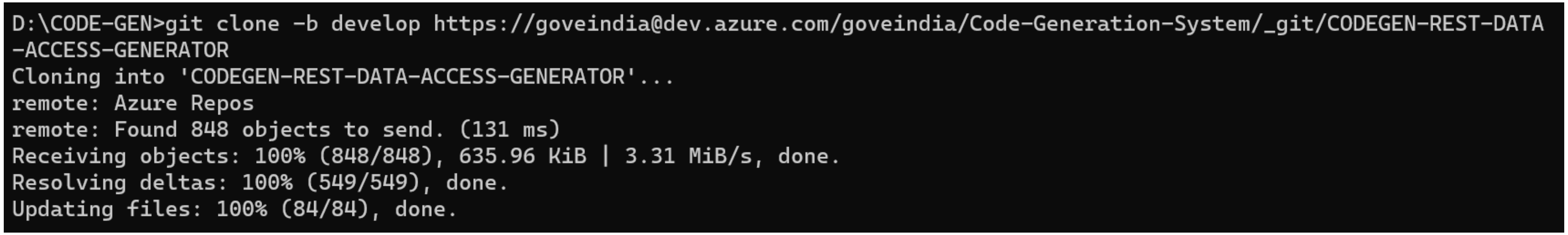


Git Installation

- ❑ Git config --global user .name”govetraining”
- ❑ git config –global user .email goveacademy@gove.co

Basic commands:

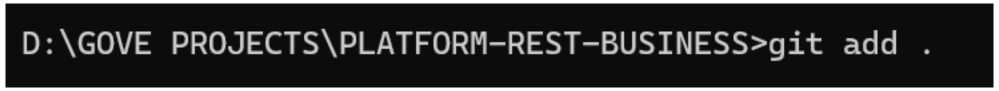
1. git clone "url" -b branchname



```
D:\CODE-GEN>git clone -b develop https://goveindia@dev.azure.com/goveindia/Code-Generation-System/_git/CODEGEN-REST-DATA
-ACCESS-GENERATOR
Cloning into 'CODEGEN-REST-DATA-ACCESS-GENERATOR'...
remote: Azure Repos
remote: Found 848 objects to send. (131 ms)
Receiving objects: 100% (848/848), 635.96 KiB | 3.31 MiB/s, done.
Resolving deltas: 100% (549/549), done.
Updating files: 100% (84/84), done.
```

To clone the base code from the repository.

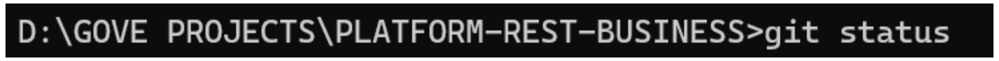
- To stage all changes in the current directory and its subdirectories, you can use the following command:



```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git add .
```

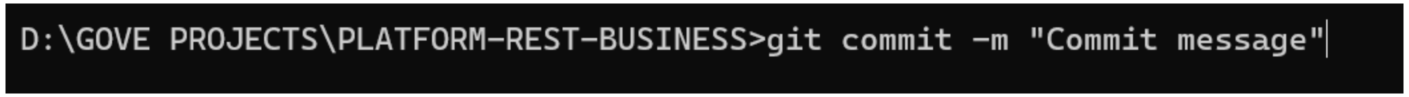
Adds a change in the working directory to the staging area.

- **Review your changes:** You can use the git status command to review the changes you have staged. It provides an overview of the modified files and the files that are ready to be committed.



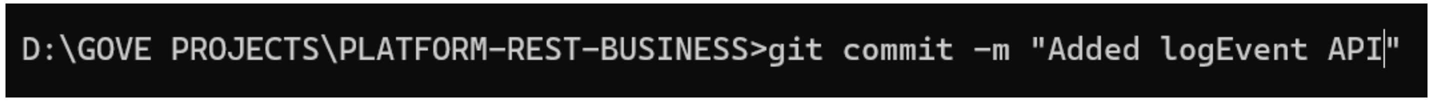
```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git status
```

Create a commit: Once you have staged your changes, you can create a commit using the git commit command. The commit message should provide a concise description of the changes you made. The general syntax is



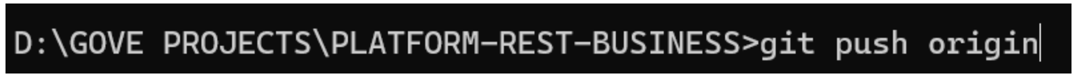
```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git commit -m "Commit message"
```

For Example



```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git commit -m "Added logEvent API"
```

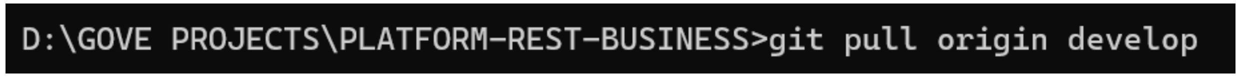
Push your changes: To send your committed changes to the remote repository, use the git push command



```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git push origin
```

Pull the latest code: To retrieve the latest code from the remote repository, use the git pull command followed by the remote name and branch name.

For example:

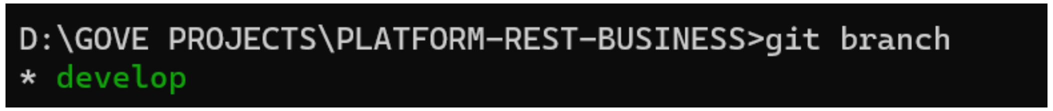


```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git pull origin develop
```

Git Branching

Main
Development
Feature

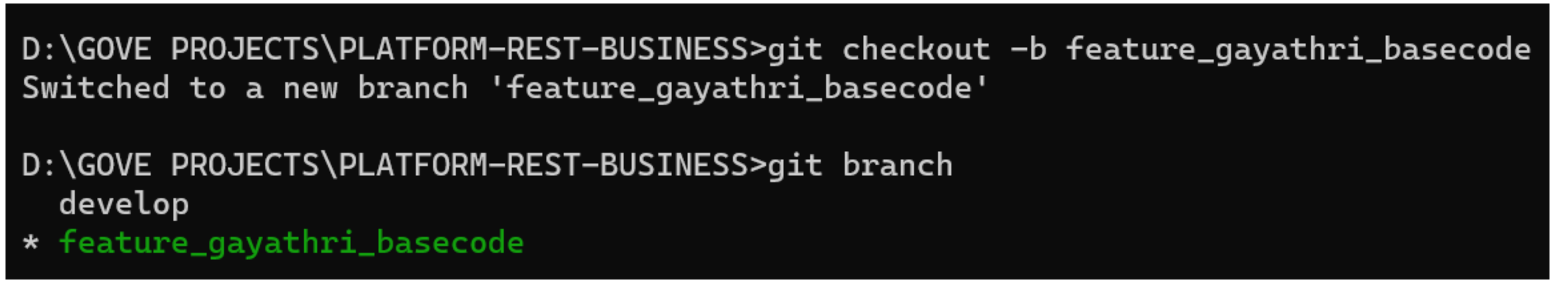
1.git branch



```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git branch
* develop
```

2.git branch checkout develop.

Switch over from one branch to another.

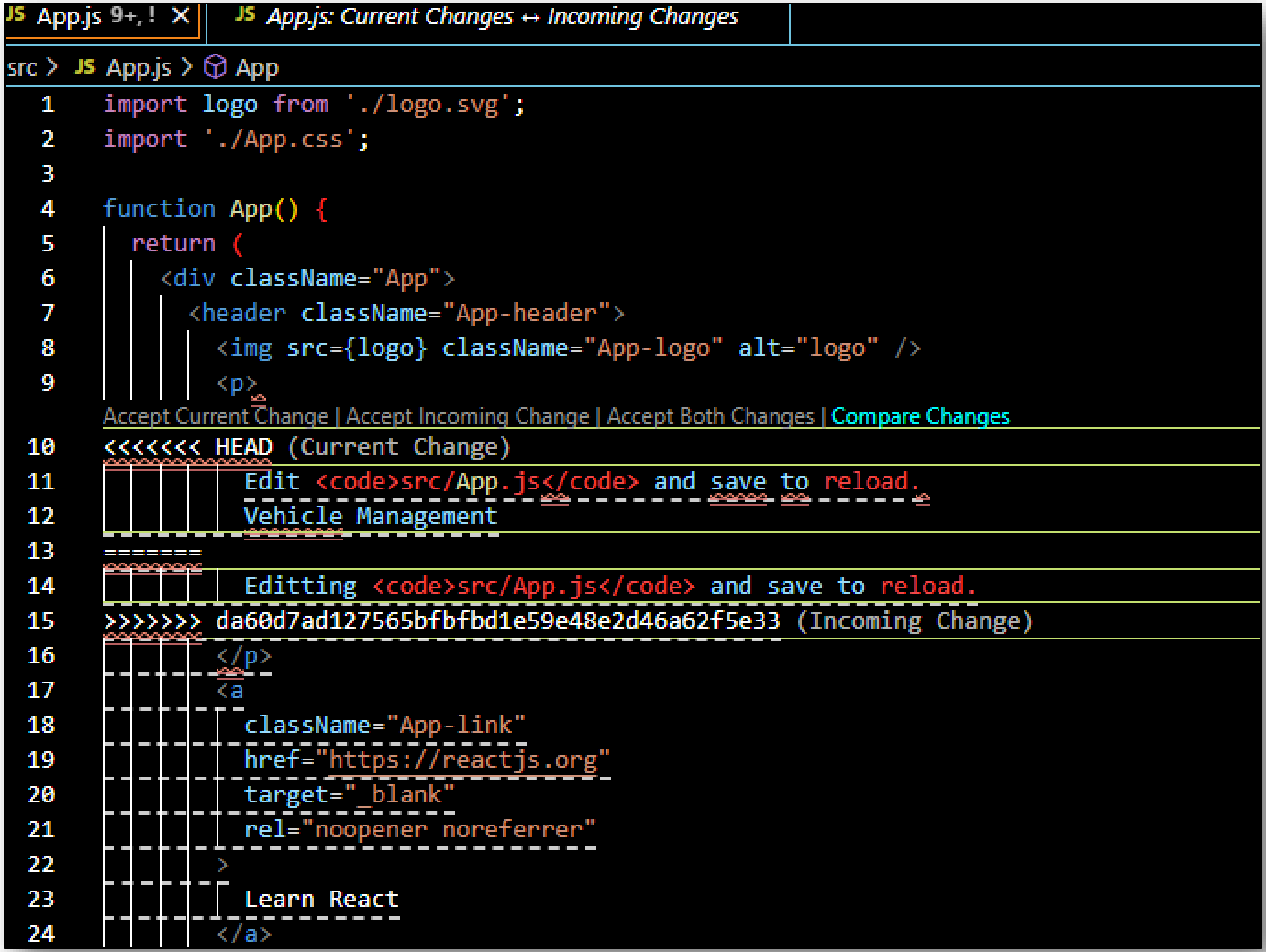


```
D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git checkout -b feature_gayathri_basecode
Switched to a new branch 'feature_gayathri_basecode'

D:\GOVE PROJECTS\PLATFORM-REST-BUSINESS>git branch
  develop
* feature_gayathri_basecode
```

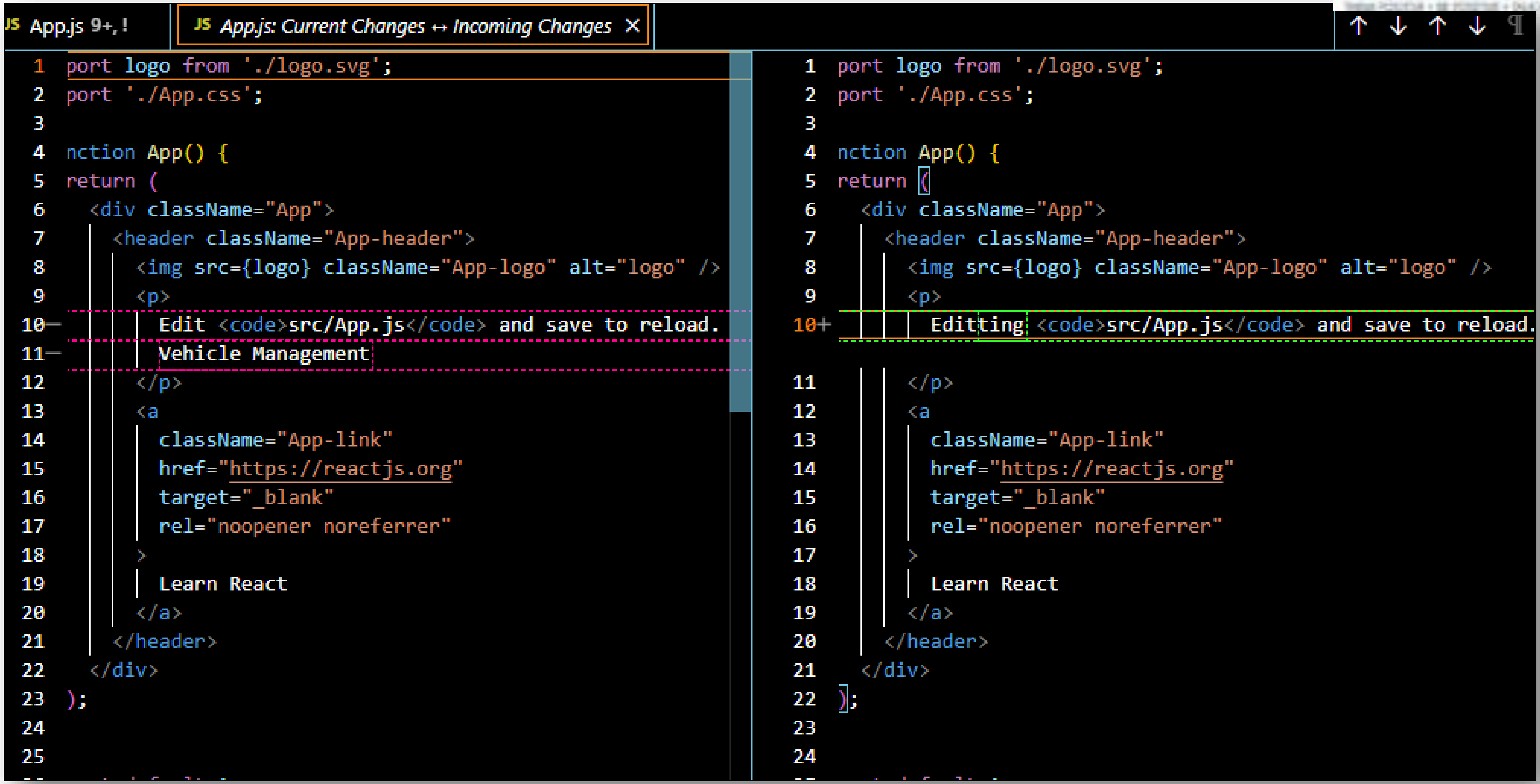
Git conflict

- ❑ If two users are working on the same base code with two different tasks.
- ❑ At a time , any one of the team member need to commit and push the code to the repository.
- ❑ Raise PR for the Committed code.
- ❑ Once the PR gets accepted , your code gets merged and moved to the develop branch.
- ❑ Now the other team member, must again pull the latest code and should commit his/her code.
- ❑ While committing, you will be asking a set of questions , by reading carefully , you need to commit the code.
- ❑ Then Raise PR and PR will be accepted by your Development Lead and code will be merged to the develop branch


App.js 9+, !
App.js: Current Changes ↔ Incoming Changes
src > App.js > App
Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes

```
import logo from './logo.svg';
import './App.css';

function App() {
  return (
    <div className="App">
      <header className="App-header">
        <img src={logo} className="App-logo" alt="logo" />
        <p>
<<<<<<< HEAD (Current Change)
          Edit <code>src/App.js</code> and save to reload.
          Vehicle Management
=======
          Editting <code>src/App.js</code> and save to reload.
>>>>>>> da60d7ad127565bfbfbd1e59e48e2d46a62f5e33 (Incoming Change)
        </p>
        <a
          className="App-link"
          href="https://reactjs.org"
          target="_blank"
          rel="noopener noreferrer"
        >
          Learn React
        </a>
```



```
port logo from './logo.svg';
port './App.css';

nction App() {
return (
  <div className="App">
    <header className="App-header">
      <img src={logo} className="App-logo" alt="logo" />
      <p>
        Edit <code>src/App.js</code> and save to reload.
        Vehicle Management
      </p>
      <a
        className="App-link"
        href="https://reactjs.org"
        target="_blank"
        rel="noopener noreferrer"
      >
        Learn React
      </a>
    </header>
  </div>
);
```

```
port logo from './logo.svg';
port './App.css';

nction App() {
return (
  <div className="App">
    <header className="App-header">
      <img src={logo} className="App-logo" alt="logo" />
      <p>
        Editting <code>src/App.js</code> and save to reload.

      </p>
      <a
        className="App-link"
        href="https://reactjs.org"
        target="_blank"
        rel="noopener noreferrer"
      >
        Learn React
      </a>
    </header>
  </div>
);
```

HAPPY CODING !