

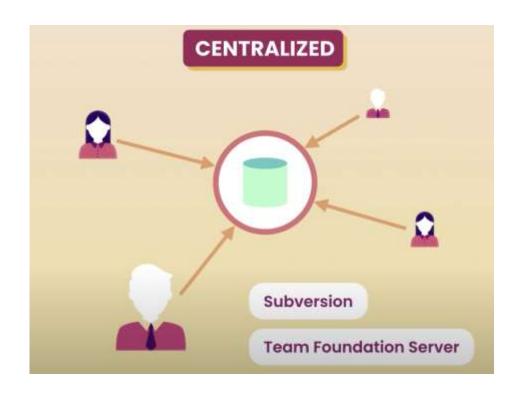
What is Version Control System & its benefits...

- Process of tracking & managing changes to software code.
- Tracks changes in code in a special DB called repository.
- Easier collaboration between developers.



Centralized Version Control System...

- Comprise of Single repository.
- Examples CVS, SVN, Preforce



Distributed Version Control System...

- Does not rely on single server.
- Every team member has a copy of the project in their local machine.



Git Introduction...

Most popular Distributed Version Control system.

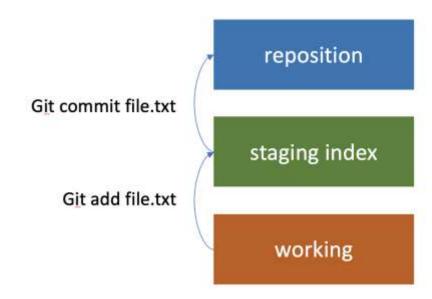
• Git is a free and open-source distributed version control system

• Source project originally developed in 2005 by Linus Torvalds



How Git Works...

- Git has a three-layer tier architecture.
- The three layers are Working directory, Staging area and Local repository.



Git directory...

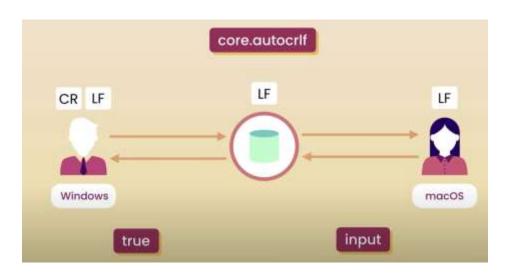
- .git
 - HEAD A pointer to the current branch
 - Config Contains all configuration preferences
 - Description description of the project
 - Index staging area between working directory and repo
 - Logs keeps record to changes that are made in ref
 - Objects all data (commits, trees, tags) are stored here
 - Hooks shell script that are invoked after executing a command
 - Refs holds your local branch remote branch and tags

Git commands...

- git config, git init, git clone
- git status, git add, git commit
- git branch, git checkout, git remote
- git fetch, git merge, git pull, git push, git log
- git rebase, git blame, git bisect, git reset, git cherry-pick
- git tag, git clean, git diff

- git config <--global | --system | --local >
- \$ git config -global user.name "Your name"
- \$ git config -global user.email "Your email"
- \$ git config --global core.editor "code --wait"
- \$ git config --global -e
- \$ git config --global core.autorlf <input | true>





```
★ > ~/Desktop/trial-projects/jaycee-sample on ** ** feature/product-description **: 13

) git status
On branch feature/product-description
Your branch is up to date with 'origin/feature/product-description'.
Changes not staged for commit:
 (use "git add <file>..." to update what will be committed)
 (use "git restore <file>..." to discard changes in working directory)
       modified: src/common/styles.js
        modified:
                   src/components/ProductSlider.jsx
        modified:
                   src/components/ViewCategoryLists.jsx
                   src/components/ViewProductDetails.jsx
                   src/pages/index.js
                   src/pages/products.js
        modified:
       modified:
                   src/styles/common.js
                   src/styles/footer.js
        modified:
                   src/styles/home/common.js
                   src/styles/home/elements.js
        modified:
                   src/styles/navbar.js
                   src/styles/products.js
        modified:
  changes added to commit (use "git add" and/or "git commit -a")
```

```
git status
On branch feature/product-description
Your branch is up to date with 'origin/feature/product-description'.
Changes to be committed:
 (use "git restore --- staged <file>..." to unstage)
       modified: src/common/styles.js
      modified: src/components/ProductElements.jsx
      modified:
                 src/components/ProductSlider.jsx
      modified:
                 src/components/ViewCategoryLists.jsx
                 src/components/ViewProductDetails.jsx
      modified:
      modified:
                 src/pages/index.js
      modified:
                 src/pages/products.js
      modified:
                 src/styles/common.js
      modified:
                 src/styles/footer.is
      modified:
                 src/styles/home/common.is
      modified:
                 src/styles/home/elements.js
      modified:
                 src/styles/navbar.js
      modified:
                 src/styles/products.js
```

```
CalendarController.php (39f5bd7) → CalendarController.php (7567ce8) △ × that the third that the second controller.php
Applications > XAMPP > xamppfiles > htdocs > WorkArea > VH_EMS_API > app > Http > Controllers > CalendarController.php
     use Illuminate\Http\Request;
                                                                      use Illuminate\Http\Request;
                                                                      use Illuminate\Support\Facades\Log;
    use Illuminate\Support\Facades\Log;
     class CalendarController extends Controller
                                                                     class CalendarController extends Controller
         public function getCalendarDetails(Request Srequest)
                                                                          public function getCalendarDetails(Request $request)
             sdate_now = Carbon::now();
                                                                              svalidation = Validator: make(srequest->=(1(), [
                                                                                   "start_date" => "required|string",
             syear = $request->query("year", $date_now->year);
             Smonth = $request->query("month", sdate_now->mon
                                                                                   "end_date" - "sometimes|string",
                                                                                       "message" - "Validation error",
                 "user_id" => $request->user_id_attr,
                                                                                   "user_id" > $request->user_id_attr,
                 "role_id" => $request->role_id_attr,
                                                                                   "role_id" => $request->role_id_attr.
                 Sholiday_records = Holiday::whereYear("date", >
                                                                                   sholiday_records = Holiday::whereBetween("date
                 $leave_records = Leave::join("users", "leaves
                                                                                   Sleave records = Leave::join("users", "leaves.
                     ->join("leave_types", "leaves.type", "=",
                                                                                       ->join("leave_types", "leaves.type", "=",
                     ->join("leave_statuses", "leaves.status",
                                                                                       ->join("leave_statuses", "leaves.status",
                     ->whereYear("start_date", Syear)
                     ->whereMonth("start_date", Smonth)
```



