Alestravel:

This lab report cantains—the elementary canopts of cycit and cycthule in enhancing version cantrol and callaborative coding practices and callaborative coding practices and callaborative development.

The research also explored distringuence on software development and its effectiveness in education. Additionally, the steedy delived into socurity practices and identified essanging trands in the software development community. Through this basic canopt of cyct and cycthule, showcasing the improvement in rode tracealedity, callaborative corresponds.

of the challanges associated weith version control in callaborative coding projects. The report aims to Familiarize the reader with the purpose of using version control System and callaborative platforms for managing code.

Introduction:

cyit and wither represent integral components of modern software development, revolutionizing version contral and callaborative coding

eyet, a distributed version control system and wither, a well done platform for hosting cyct responsitories, have become integral in modern development workflowers.

Mogethet, cycland cyclhele have become sympmous weith best prochices in the software 20 velopment, co de management an 1 praject

efficiency.

## Materials:

1 camputor

@ cyit wersoon contral system

3 yither online platform

@ Yent editor.

Activity:

9 Activity I: Create a gét repo

I first, 9 have to croate a directory which 9 want as my reparentary in a location:

\$ mk don Report 1

2. gnétialize the directory as a repository: \$ git carefig -- global irroit. Default Branch mas n \$ get inot \$ git branch -m main

3. Have to use config to add my oame

\$git earlig -- global user-name "Orini".

øgit carfig -- globral aver. e roadl "Ovnibanik 1652001 @gorail.cam

4. Thon vueste a fite in very folder

1) Report I

11) Report I (Port2)

cade to promot text: 5. The good de -the file Promot "9 am Drono".

6. Add - That file to main loranch and cammost this:

\$ get a ad.

of git commit - m" A file. Report is addod"

7. Jo Frack -thois file in trathers were have

to add an vil:

\$ git remote add origin http:// gither .com/ Orenibanik Inoparo 1. git

sigit boronch - N main

s git push - varigin main

8. Then adding another text file to the main loranch:

I get add.

g gét commil -m" A file: Report + (Port 2) a dell'

\$ git push - u arigion main

Activity - 2: Greate New Brances and merge to main

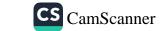
1. Now, 9 house to owate new leconch

8 git check out - 6 bromch I

& git add.

qu'it commit -m'a file a doed do Branch I qu'it push-varigin branch I

CS CamScanner



Sigit push - v origin main [Sweitched to main]

sigit push - v origin New Browneh

sigit checkout main

tt sweitched into Jeraneh main'

of gif morge man Branch I of gif push - o' origin main of gif pull How which i words of 5000.

B

## Grit cammand list:

- 4) git canfig -- global user mame (set the mame )

  That we'll be attached to user commits and tage
- 2) git config -- global user. email "xyz @granail. com"
  (set the email address that will be attached
  to user commits and Jags.
- 3) git status (Displays the istatus of wanking déroctory. Option in cluded neue, staged & modified files)
- u) git add [file] (Add a file to the staging and)
  5) git diff [File] (Shows charges between working
  directory & staging area)



- 6) get check out [File] (Dis cond changes in working doine ctory)
- 7) git cammit (Crecte a neue cammil from charges added to the staging area. The Cammit have a menage)
- 8) git rm [file] (Remover file from working dérectory and staging onea)
- 9) git branch (List all deranches in reparétory)
- 10) git branch & branch-name] (Create new leranch,
  resperencing the current
  Head)
- 11) git merge [bronch-name]: Ontegrates changes from one leranch into another.
- 12) git log: (list commit history of coverent loranch)
- 13.) git log ref (list (ammits that are represented on the current branch and not manch and not moreged into ref.)
- 14) git tag (list all tags)
- 14) git tag-a[name] (create a tag object named "marma" for current cammit.



- 15) git tag-dt name] (Remove a tag from local repository)
- 16) git fetch [remote] (Fetch changes from the remote, but not update tracking branches)
- 14) get pull[remoto] (fotch changes from the remote and merge current lexan ch with its upsteam)
- (pugh U [remote] [branch] (Pugh Jocal)
- 19) git stash drop (discards most recent stashed filed)
- 20) get pull stash some (Stores modified Anacked files)
- 21) mkder project i (væste nene falder projecti)
- 22) git inst: (Croats a new git repare tory)
- 23) got help (displays all the necessary into about git caromands
- 24) git help ( désplays all the necessary i'ntonmities all the necessary i'ntonmities
- 25) git releve ( one branch and replay them on an ad alternate leranch)



Discussion:

During this lab, when I first statted wing cyif I wilkful. I no into a faw common problems. Syther owners One big challonge was imappropriate syntex usine use. I discovered that failing to the enclose to toronaid memorys ion execution makes also when specifying loranch mones because of the space. Also this minplaced punctuation, incorrect spacing or mining syntax. Spelling mintaked resulted in failed aperations. So, I should be careful to a syntax details for second successful exception.

## Conclusion:

In conclusion, my exploration at Crit and Cyithule has been both challenging and rewarding Despote initial difficulties, these tooks significantly exhance code management and calculation.

cyit and cyithule are now exential for efficient software Development.