



# Git

## Version control and Collaboration



# Content

- What is version control
- Git software
- Git workflow
- Tips

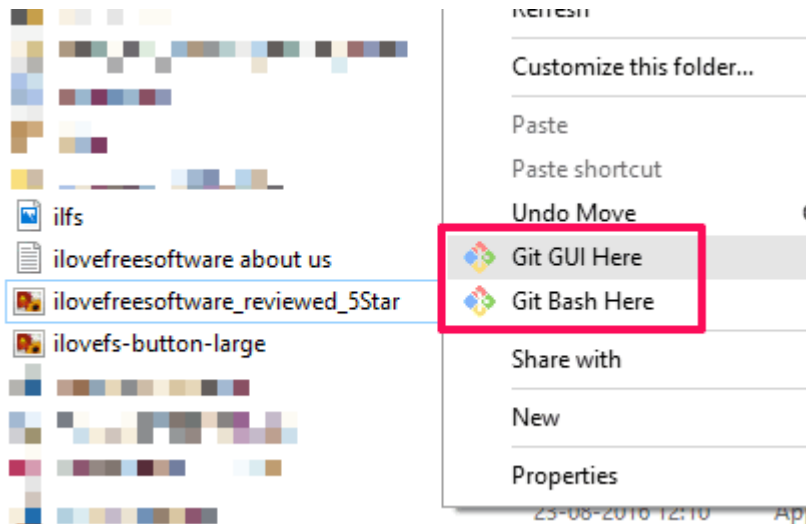


# What is version control

- Keep previous backups (v1.0, 1.2, 2.0)
- Keep different versions of project (New UI, etc.)
- Collaboration
  - I work on one version you work on another

# The git software

- Git for windows
- Terminal
- Right click



```
MINGW32:~/git
Welcome to Git (version 1.8.3-preview20130601)

Run 'git help git' to display the help index.
Run 'git help <command>' to display help for specific commands.

Bacon@BACON ~
$ git clone https://github.com/msysgit/git.git
Cloning into 'git'...
remote: Counting objects: 177468, done.
remote: Compressing objects: 100% (52057/52057), done.
remote: Total 177468 (delta 133396), reused 166093 (delta 123576)
Receiving objects: 100% (177468/177468), 42.16 MiB | 1.84 MiB/s, done.
Resolving deltas: 100% (133396/133396), done.
Checking out files: 100% (2576/2576), done.

Bacon@BACON ~
$ cd git

Bacon@BACON ~/git (master)
$ git status
# On branch master
nothing to commit, working directory clean

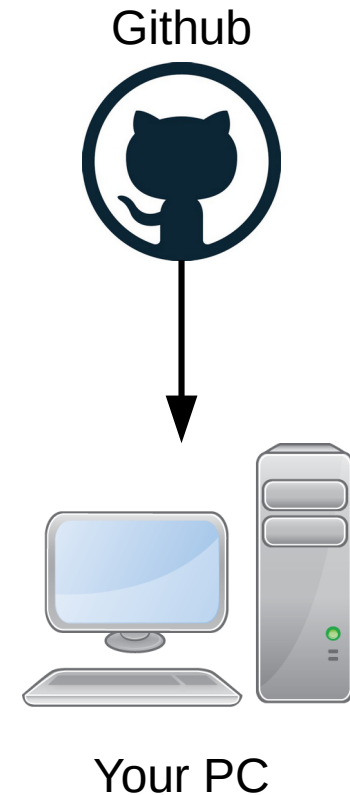
Bacon@BACON ~/git (master)
$
```

\$git status

# Git clone

- Clones a repository into a newly created directory.

```
$git clone projectx@github.git
```



# Github Git clone

The screenshot shows the GitHub interface for the repository 'Steedalio / UI-Editor'. The repository is marked as 'Private' and was 'generated from Steedalio/UnityPrototype'. The navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the navigation bar, there are buttons for 'Go to file', 'Add file', and a green 'Code' button with a dropdown arrow. A red box highlights the 'Code' button and the 'Clone' dropdown menu that appears. The 'Clone' menu shows three options: 'HTTPS', 'SSH', and 'GitHub CLI'. The 'HTTPS' option is selected, and the URL 'https://github.com/Steedalio/UI-Editor' is displayed in a text box. Below the URL, it says 'Use Git or checkout with SVN using the web URL.'.

Search or jump to... / Pull requests Issues Marketplace Explore

Steedalio / UI-Editor (Private)  
generated from Steedalio/UnityPrototype

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

main 1 branch 0 tags

Go to file Add file Code

Clone  
HTTPS SSH GitHub CLI  
https://github.com/Steedalio/UI-Editor  
Use Git or checkout with SVN using the web URL.

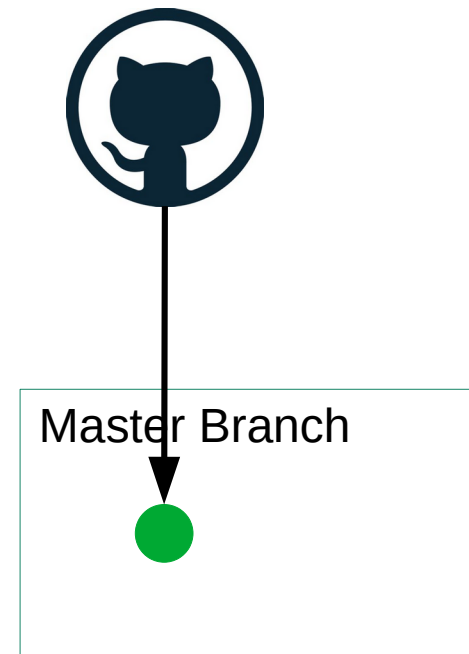
```
MINGW64:/c/Users/Sagar

Sagar@Sagar-Windows10 MINGW64 ~/tempgit (master)
$ cd ..

Sagar@Sagar-Windows10 MINGW64 ~
$ git clone git@github.com:reply2sagar/B1.git
```

# Git branch

- Currently on master branch

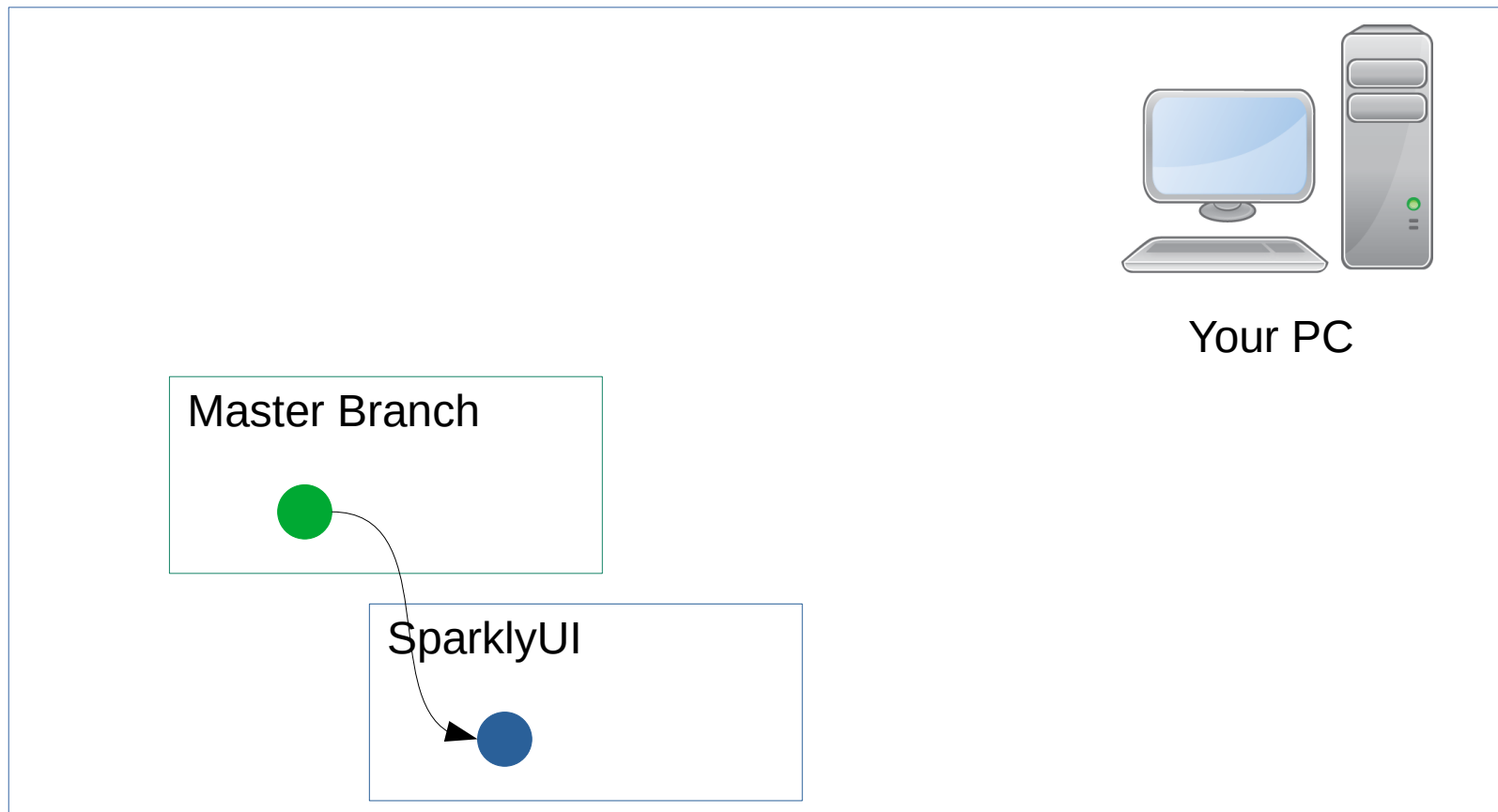


```
MINGW64:/c/Users/Sagar  
Sagar@Sagar-Windows10 MINGW64 ~/tempgit (master)
```

# Creating a branch

```
$git branch SparklyUI
```

- Creates a separate branch on your computer.





# Edit project

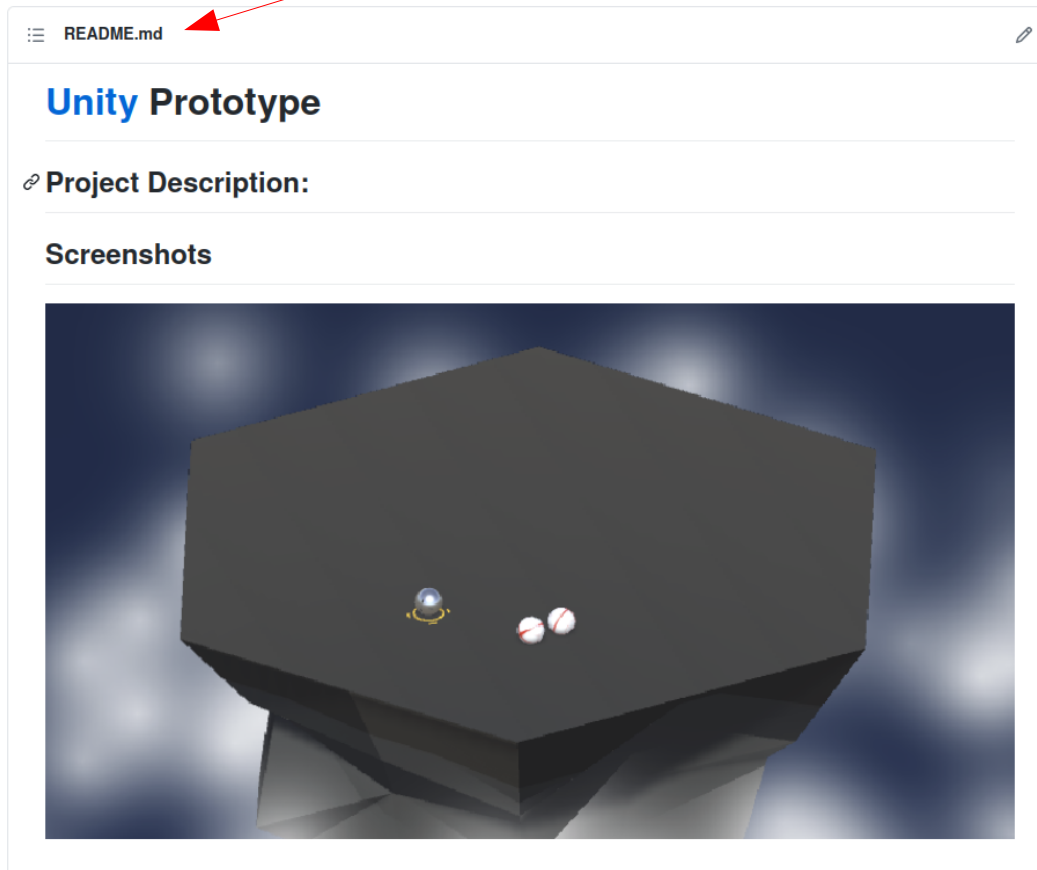
- Change the picture

```
# [Unity](https://unity.com/) Prototype
```

```
## Project Description:
```

```
## Screenshots
```

```
<img src='Screenshot.PNG' align="right" width=960>
```



# Change the image and Readme file

- Added image
- Modify Readme.

```
# [Unity](https://unity.com/) Prototype
## Project Description:
## Screenshots
```

```
<img src='Screenshot.PNG' align="right" width=960>
```

```
# [Unity](https://unity.com/) Prototype
```

```
## Project Description:
In this project we use behaviour trees to control a thief.
He finds which door is unlocked,
opens it and steals them diamond if he has less than 50 gold.
## Screenshots
```

```
<img src='demo.gif' >
```



# Committing changes

- We commit the changes to the current branch.
  - Add files to the commit
  - Commit the changes to the branch

`$git add .`

`$git commit`

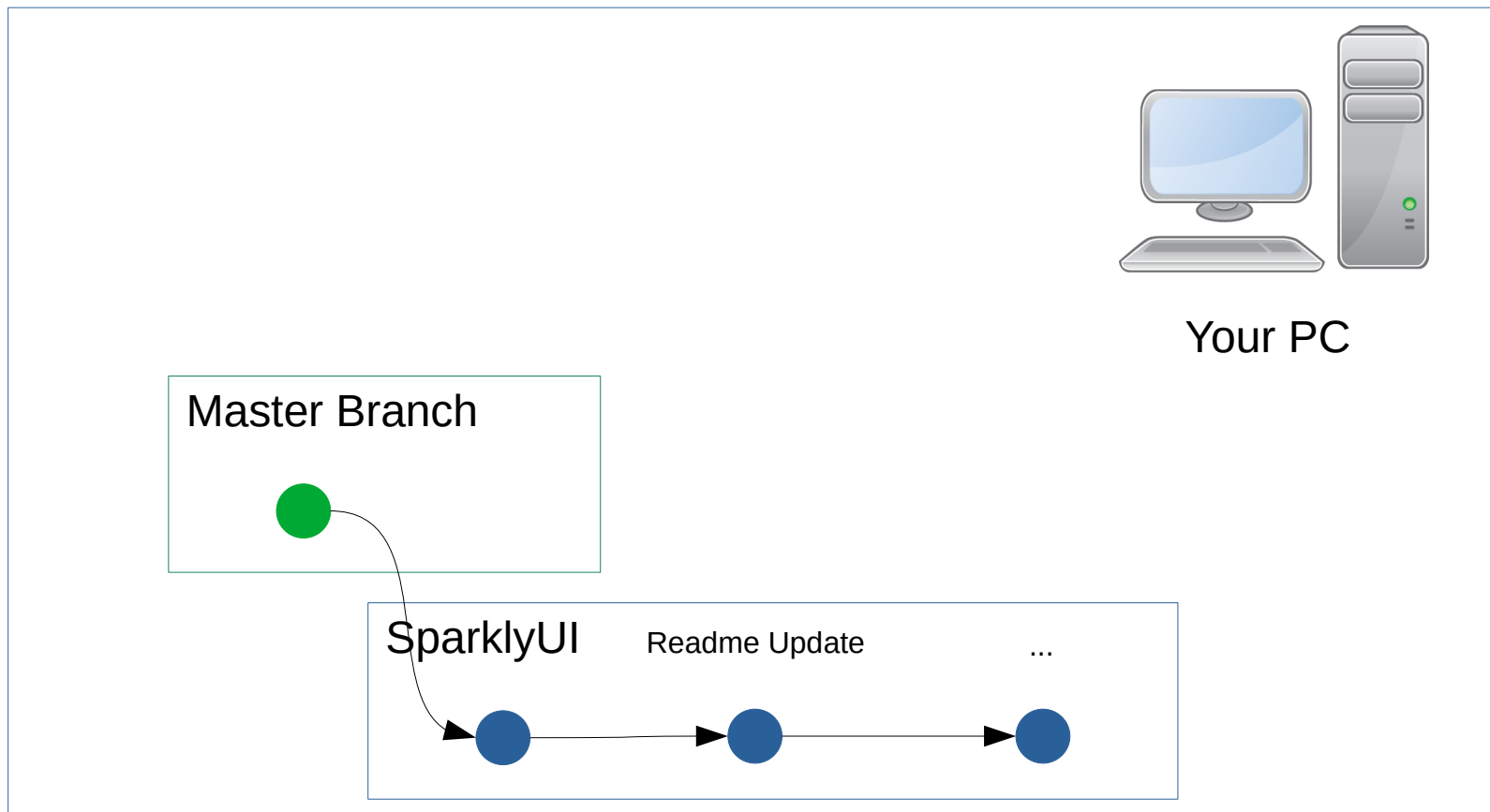
100

- Commit message e.g:
- ```
Updated the Readme figure
```

Files changed

# Commits = tasks

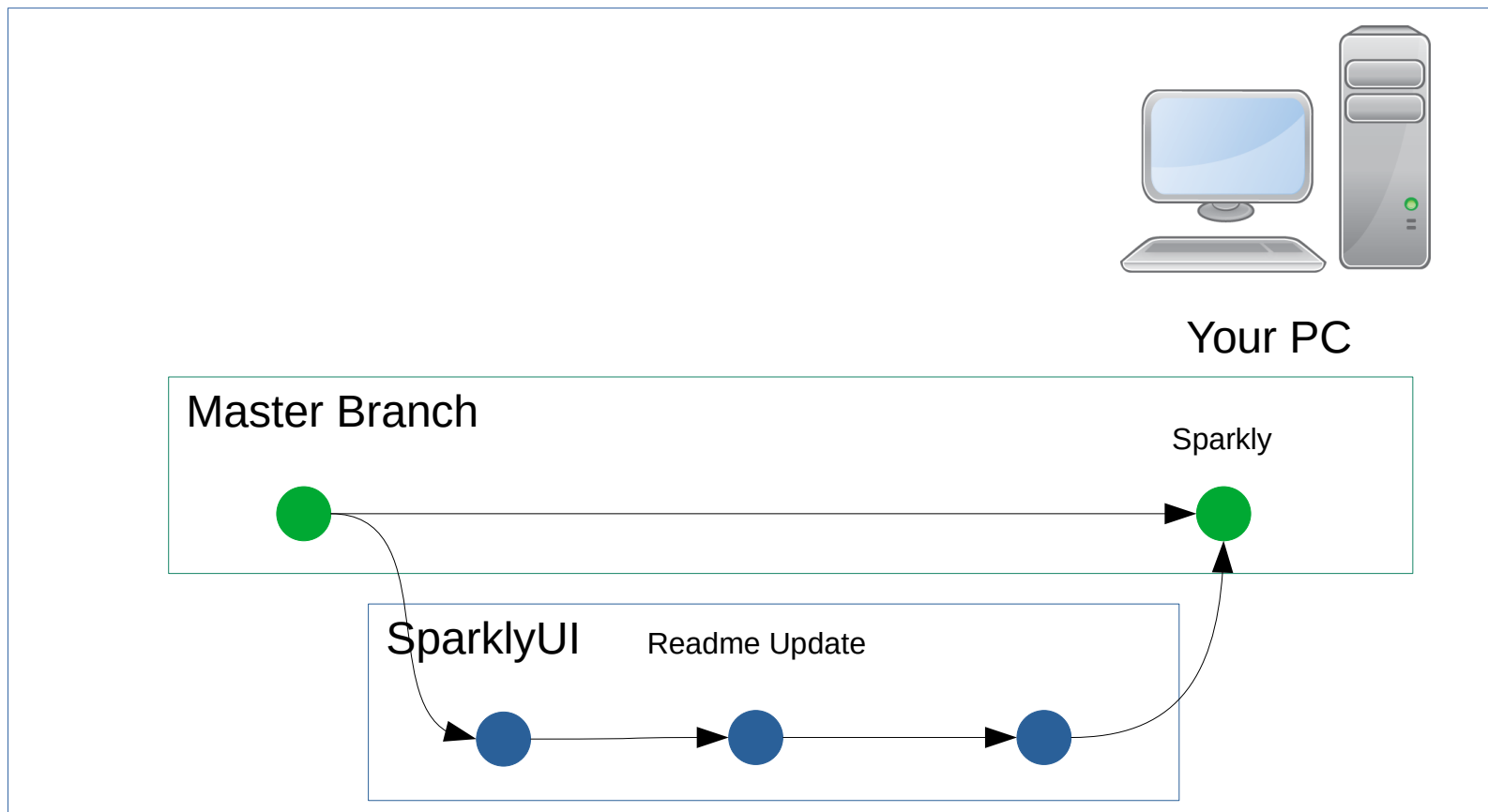
- Add some more changes (...)



# Merging

```
$git checkout main  
$git merge SparklyUI
```

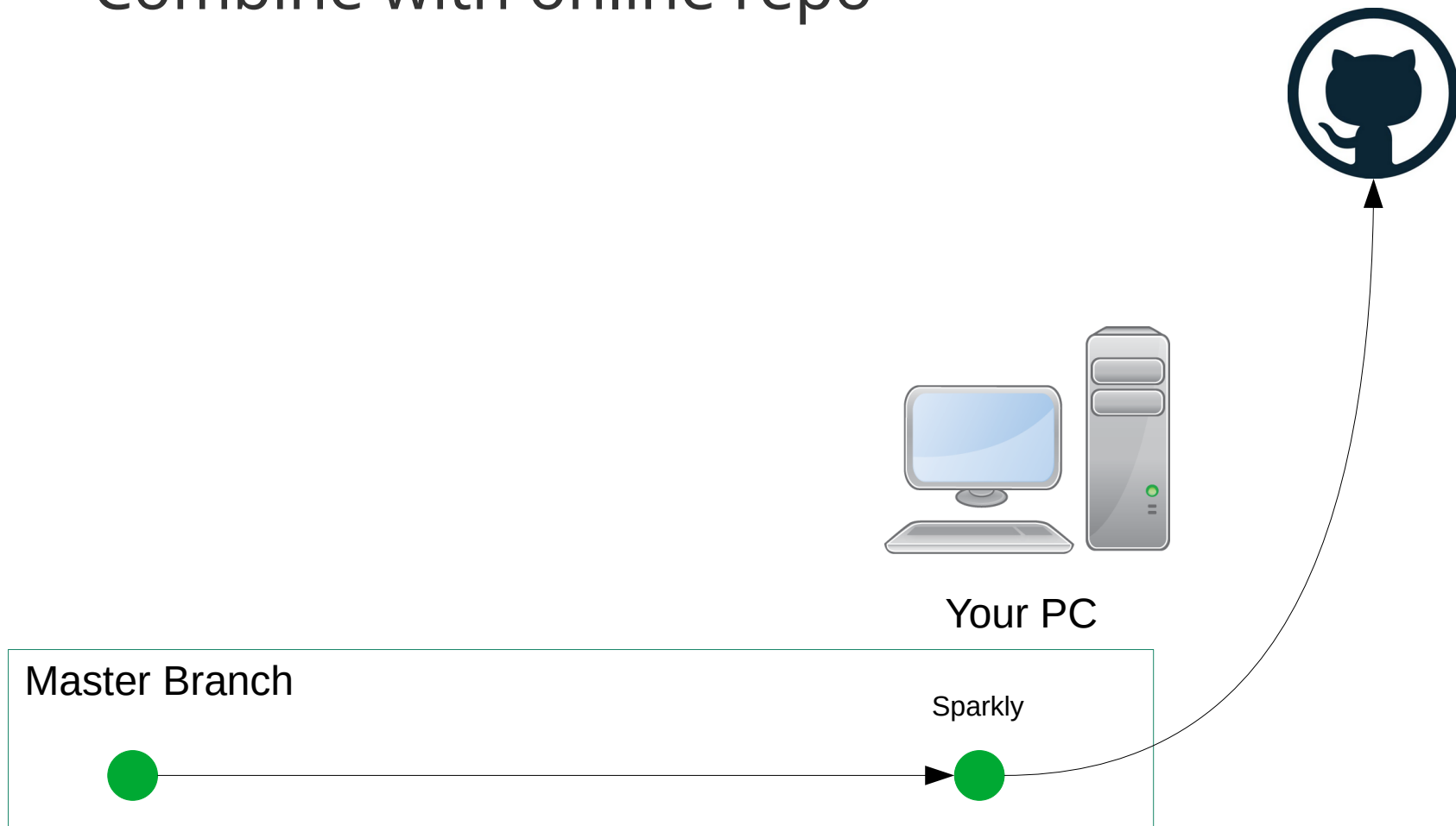
- Combine the changes with the main branch



# Now to update the online repo

```
$git push origin
```

- Combine with online repo



# See online repo (Github)

Search or jump to... Pull requests Issues Marketplace Explore

Steedalion / BehaviourTrees Private  
generated from Steedalion/UnityPrototype

Unwatch 1 Star 0 Fork 0

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

main BehaviourTrees / README.md Go to file ...

Steedalion Behavior trees conquered. Latest commit 3434857 4 days ago History

1 contributor

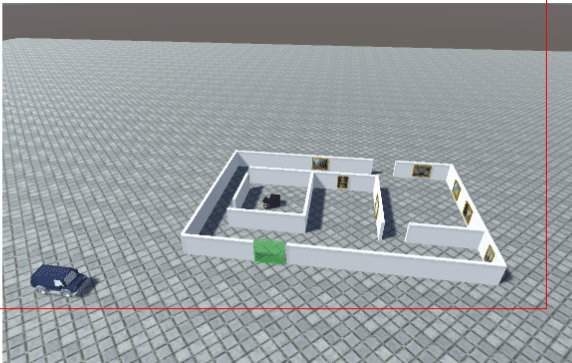
12 lines (7 sloc) 263 Bytes Raw Blame

## Unity Prototype

### Project Description:

In this project we use behaviour trees to control a thief. He finds which door is unlocked, opens it and steals them diamond if he has less than 50 gold.

### Screenshots

A screenshot of a 3D game environment. It features a grey, textured ground with a white, maze-like structure. A small blue car is positioned on the left side of the maze. A green square is visible on the ground near the entrance of the maze. The background is a simple grey plane.

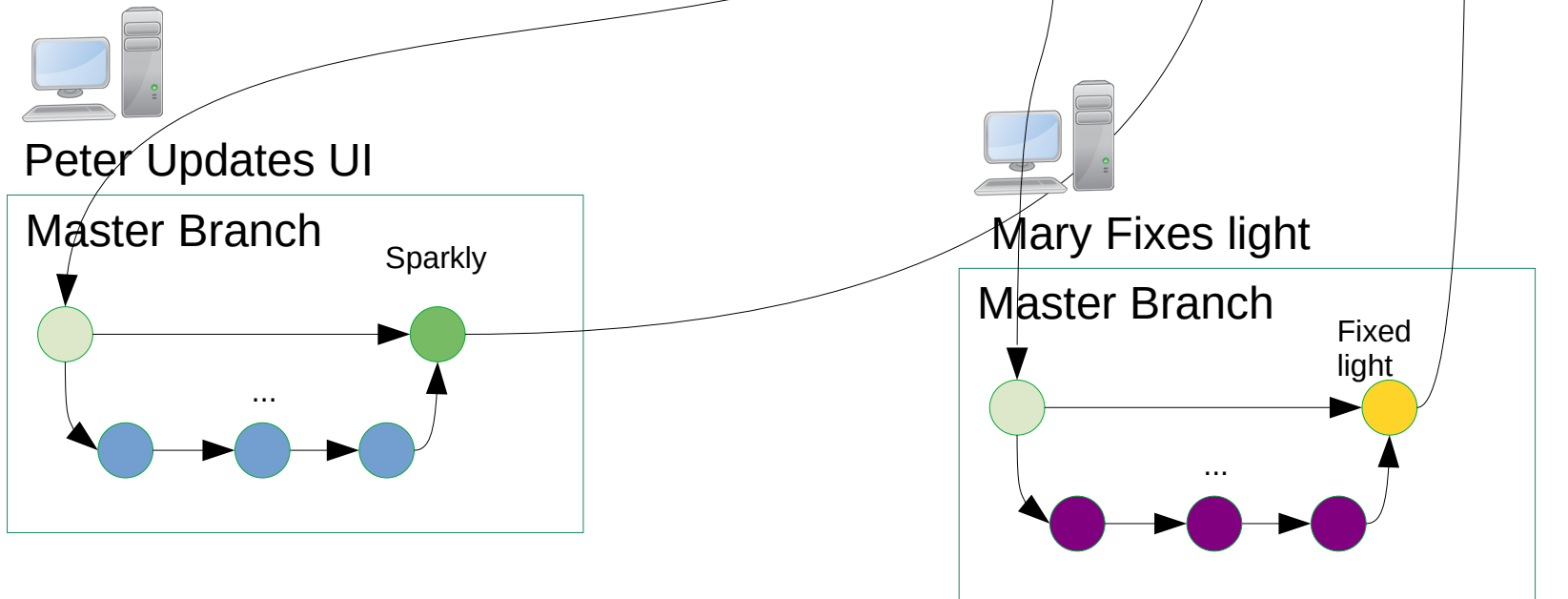
Picture has changed



# Collaboration



- Same starting point
- Work concurrently
- Merge results





# Thank you