Lab Assignment 2

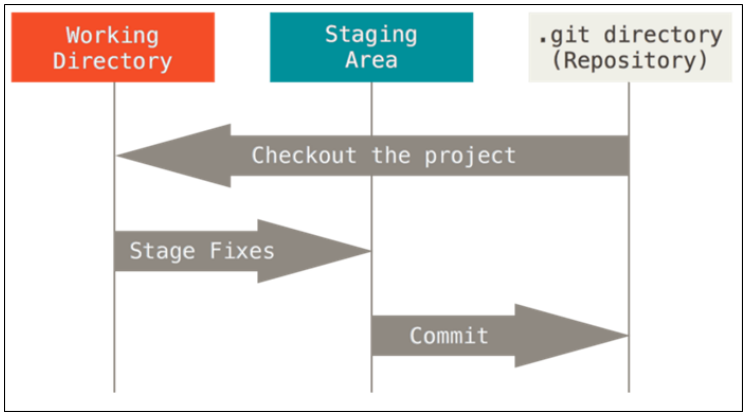
Git Basics

```
in-order traversal
*/
public void inOrderTraversal(Node root){
   //implement me
}


/*
post-order traversal
*/
public void postOrderTraversal(Node root){
   //implement me
}


/*
a method to find the node in the tree
with a specific value
*/
public boolean find(Node root, int key){
  //implement me
   return false;
}


/*
a method to find the node in the tree
with a smallest key
*/
public int getMin(Node root){
   //implement me
}
```



Objectives

- Learn about Git
- Explore Git Bash
- Create a Git repository
- Upload it to GitHub

Rubric

- 90 points - 6 functions implemented and stored as a separate commit on GitHub
- 10 points - Javadoc comments

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Description

This assignment will get you familiar with the basic commands of Git, a version control system. You will need to download Git (see *Version Control.pptx* for details) and install it on your machine. There are a few simple commands that you need to learn to be able to use Git. The basic operations can be found in the power slides.

You will implement a few simple operations for a Binary Search Tree. Download the java file from Canvas labeled *TreeDemo.java.* In that file you will find the following methods which need to be implemented :

- preOrderTraversal(Node root)
- inOrderTraversal(Node root)
- postOrderTraversal(Node root)
- find(Node root, int key)
- getMin(Node root)
- getMax(Node root)

Details

Create a new directory on your machine and initialize as a git repository by using the ***git init*** command. You might want to also set a few global defaults, refer to the slides for details. Place *TreeDemo.java* into that directory and use the ***git add TreeDemo.java*** command to stage the file. After that you can commit it by invoking the ***git commit -m "commit message"*** command. You need to implement one function at a time and make a commit to the repository. Essentially you should have at least 6 commits to the repository, one after implementing each function.

Once you have implemented all of the functions and everything is up to date in your working directory, you need connect your local repository with GitHub. Refer to power point slides for details. You will need to create a GitHub account and a new repository on GitHub. After that it's just a matter of invoking a few commands to store your project on GitHub.

Submission

For your submission, simply submit a **link** to your **GitHub repository**.

This is an individual assignment. Therefore, a submission is required from each student.

Deadline: on Canvas