[Your Name] ([Your Student ID])







Assignments

Mastering   
Version Control with Git

1st edition

Contents

[Introduction part 2](#_Toc463301940)

[Exercise 1 3](#_Toc463301941)

[Exercise 2 4](#_Toc463301942)

[Exercise 3 5](#_Toc463301943)

[Exercise 4 6](#_Toc463301944)

[Exercise 5 7](#_Toc463301945)

[Exercise 6 8](#_Toc463301946)

[Video 1 9](#_Toc463301947)

[Intermediate part 10](#_Toc463301948)

[Exercise 7 11](#_Toc463301949)

[Exercise 8 13](#_Toc463301950)

[Exercise 9 14](#_Toc463301951)

[Advanced part 15](#_Toc463301952)

[Exercise 10 16](#_Toc463301953)

[Exercise 11 18](#_Toc463301954)

[Exercise 12 19](#_Toc463301955)

[Exercise 13 20](#_Toc463301956)

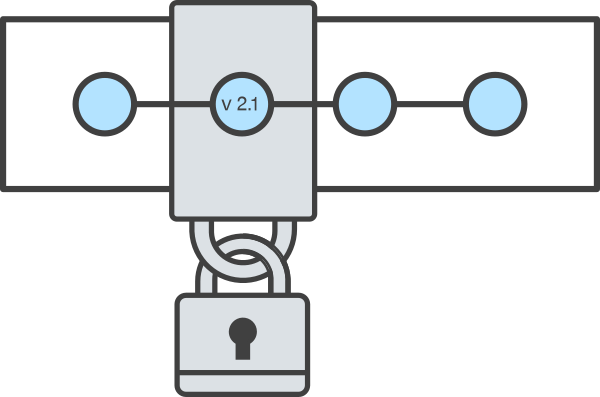
[Exercise 14 21](#_Toc463301957)

[Feedback 22](#_Toc463301958)

# Introduction part

## Exercise 1

**What is Version Control?** (Slide 11-20)

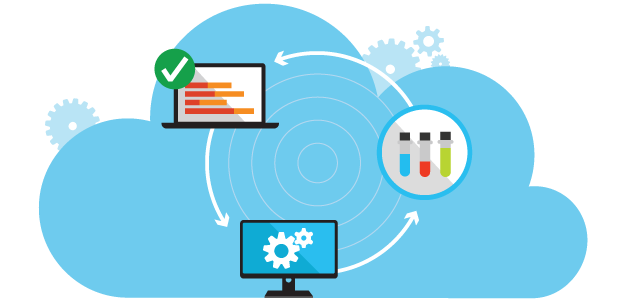


In simple words explain why you should use Version Control and what are the Benefits of using that for you and your team?

[Your answer]

## Exercise 2

**Continuous Integration** (Slide 21-25)



Briefly explain Continuous Integration development practice.

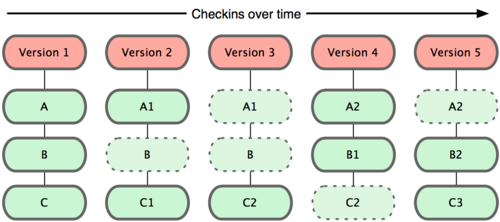
[Your answer]

List some of the Continuous Integration software and tools and compare them briefly.

[Your answer]

## Exercise 3

**How does Git work?** (Slide 31-32)



Explain what the difference between how does Git work comparing to other Version Control Systems?

[Your answer]

## Exercise 4

**Installing Git** (Slide 45-47)

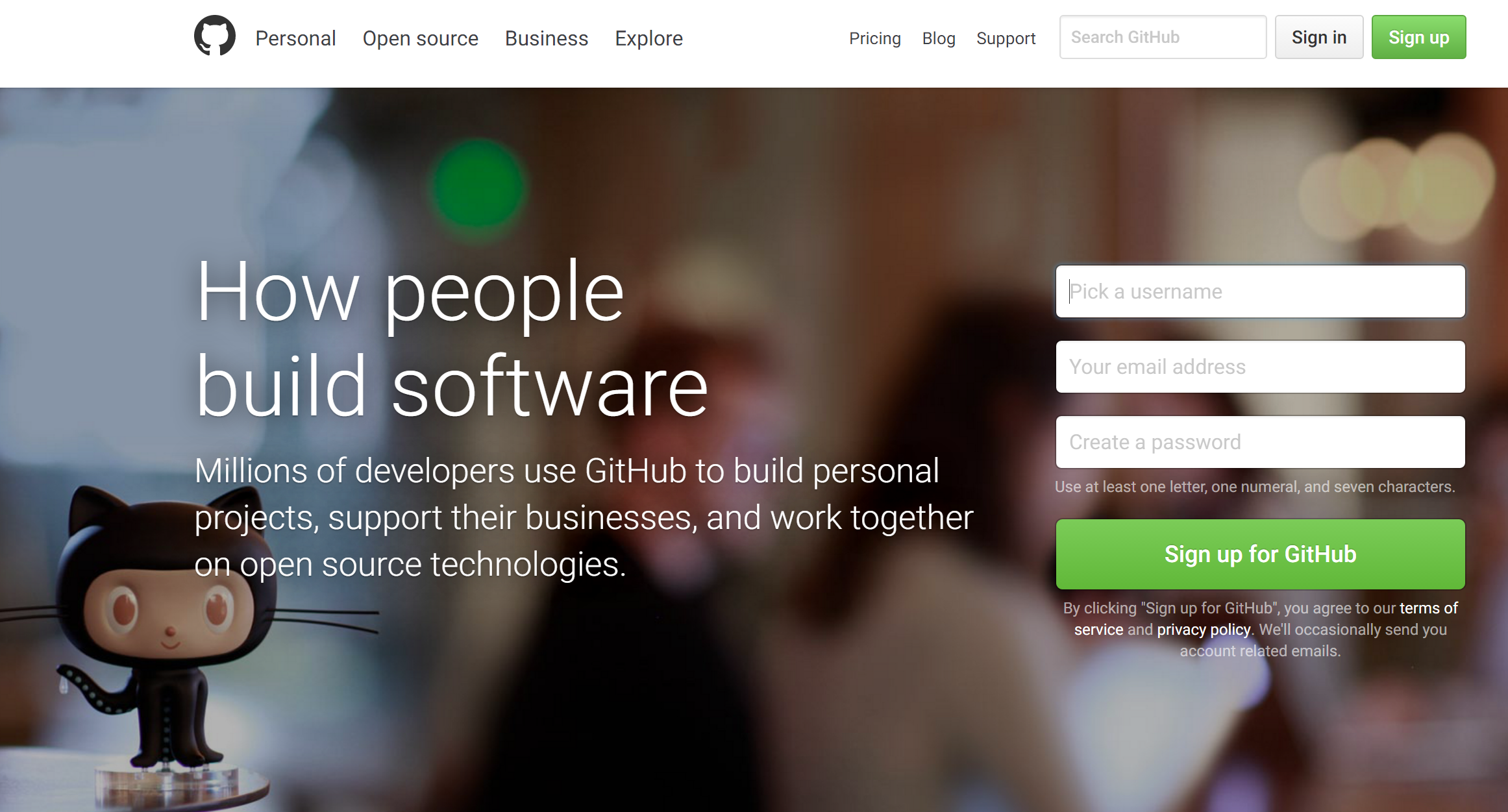


Install Git on your computer and provide screenshots from the process.

[Your answer]

## Exercise 5

**GitHub** (Slide 50-51)



Create your account in GitHub and write your username.

[Your answer]

## Exercise 6

**Related Articles**



Search and find 3 beneficial online articles, videos, or etc. related to the material of this part of the course, and briefly describe the material you learned from them.

Link 1:

Subject:

What you learned:

[Your answer]

Link 2:

Subject:

What you learned:

[Your answer]

Link 3:

Subject:

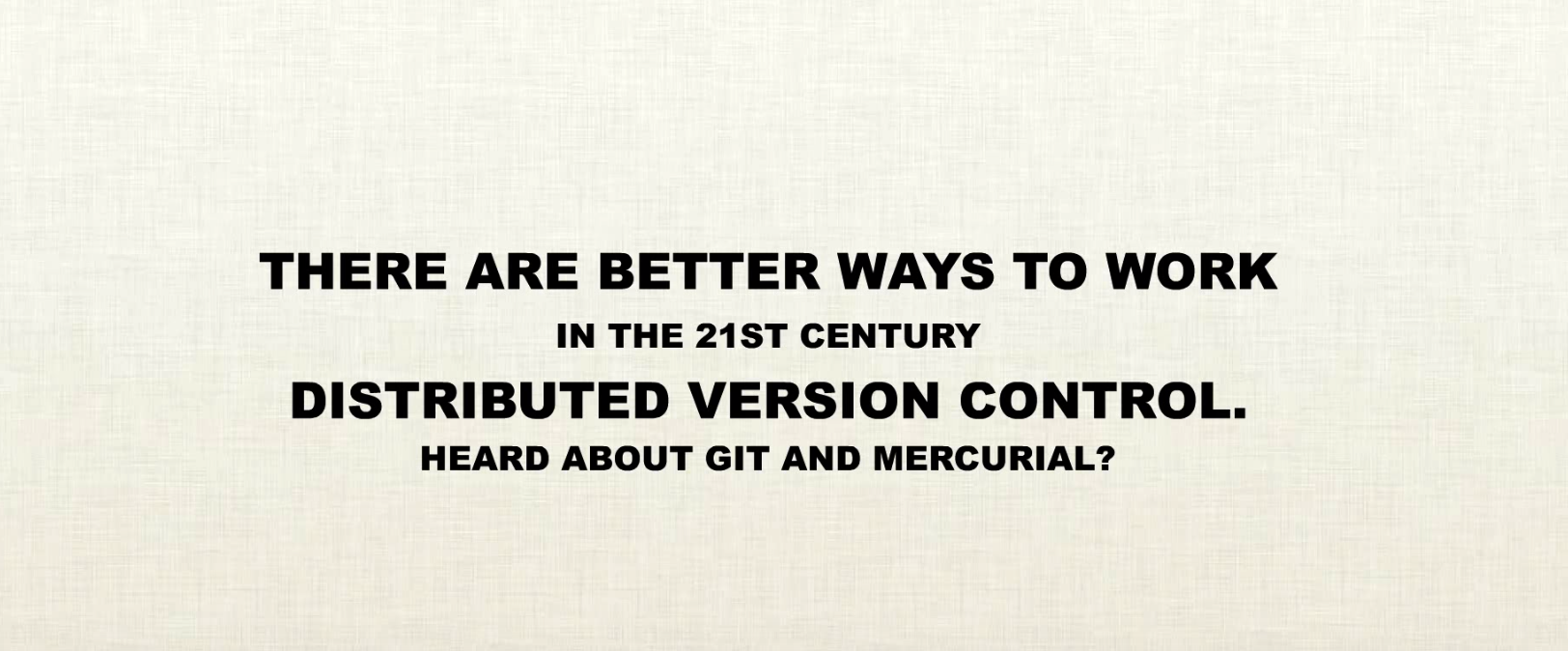
What you learned:

[Your answer]

## Video 1

**Title: Centralized vs Distributed Version Control in 90 seconds**

**Duration: 91 seconds**



Link: <https://www.youtube.com/watch?v=_yQlKEq-Ueg>

**How was it? Anything new you learned?**

[Your answer]

# Intermediate part

## Exercise 7

**Git commands** (Several slides)



Fill the blanks with the proper git commands:

git commit – git revert – git config – git add – git init – git log – git reset – git clone – git stash – git status – git checkout – git clean

The \_\_\_\_\_\_\_\_\_\_\_\_ command removes untracked files from your working directory. This is really more of a convenience command, since it’s trivial to see which files are untracked with git status and remove them manually.

The \_\_\_\_\_\_\_\_\_\_\_\_ command serves three distinct functions: checking out files, checking out commits, and checking out branches.

\_\_\_\_\_\_\_\_\_\_\_\_ temporarily shelves changes you‘ve made to your working copy so you can work on something else, and then come back and re-apply them later on.

The \_\_\_\_\_\_\_\_\_\_\_\_ command copies an existing Git repository. This is sort of like svn checkout, except the “working copy” is a full-fledged Git repository—it has its own history, manages its own files, and is a completely isolated environment from the original repository.

The \_\_\_\_\_\_\_\_\_\_\_\_ command commits the staged snapshot to the project history.

The \_\_\_\_\_\_\_\_\_\_\_\_ command displays the state of the working directory and the staging area. It lets you see which changes have been staged, which haven’t, and which files aren’t being tracked by Git.

The \_\_\_\_\_\_\_\_\_\_\_\_ command lets you configure your Git installation (or an individual repository) from the command line. This command can define everything from user info to preferences to the behavior of a repository.

The \_\_\_\_\_\_\_\_\_\_\_\_ command adds a change in the working directory to the staging area. It tells Git that you want to include updates to a particular file in the next commit.

The \_\_\_\_\_\_\_\_\_\_\_\_ command displays committed snapshots. It lets you list the project history, filter it, and search for specific changes.

The \_\_\_\_\_\_\_\_\_\_\_\_ command creates a new Git repository. It can be used to convert an existing, unversioned project to a Git repository or initialize a new empty repository.

The \_\_\_\_\_\_\_\_\_\_\_\_ command undoes a committed snapshot. But, instead of removing the commit from the project history, it figures out how to undo the changes introduced by the commit and appends a new commit with the resulting content.

When you undo with \_\_\_\_\_\_\_\_\_\_\_\_ (and the commits are no longer referenced by any ref or the reflog), there is no way to retrieve the original copy—it is a permanent undo.

## Exercise 8

**git init vs. git init –bare** (Slide 16-19)



Explain briefly the difference between “git init” and “git init –bare” commands.

[Your answer]

## Exercise 9

**Related Articles**



Search and find 3 beneficial online articles, videos, or etc. related to the material of this part of the course, and briefly describe the material you learned from them.

Link 1:

Subject:

What you learned:

[Your answer]

Link 2:

Subject:

What you learned:

[Your answer]

Link 3:

Subject:

What you learned:

[Your answer]

# Advanced part

## Exercise 10

**Git commands** (Several slides)



Fill the blanks with the proper git commands:

Git branch

git commit --amend

git pull

git rebase

git remote

git push

git fetch

git checkout

git merge

The \_\_\_\_\_\_\_\_\_\_\_\_ command lets you navigate between the branches created by git branch.

The most common use case for \_\_\_\_\_\_\_\_\_\_\_\_ is to publish your local changes to a central repository. After you’ve accumulated several local commits and are ready to share them with the rest of the team, you (optionally) clean them up with an interactive rebase, then push them to the central repository.

The \_\_\_\_\_\_\_\_\_\_\_\_ command imports commits from a remote repository into your local repo. The resulting commits are stored as remote branches instead of the normal local branches that we’ve been working with.

The \_\_\_\_\_\_\_\_\_\_\_\_ command, fetch the specified remote’s copy of the current branch and immediately merge it into the local copy.

The \_\_\_\_\_\_\_\_\_\_\_\_ command lets you create, view, and delete connections to other repositories.

The \_\_\_\_\_\_\_\_\_\_\_\_ rebase the current branch onto <base>, which can be any kind of commit reference .

The \_\_\_\_\_\_\_\_\_\_\_\_ command lets you take the independent lines of development created by git branch and integrate them into a single branch.

The \_\_\_\_\_\_\_\_\_\_\_\_ command lets you create, list, rename, and delete branches. It doesn’t let you switch between branches or put a forked history back together again.

The \_\_\_\_\_\_\_\_\_\_\_\_ command is a convenient way to fix up the most recent commit. It lets you combine staged changes with the previous commit instead of committing it as an entirely new snapshot. It can also be used to simply edit the previous commit message without changing its snapshot.

## Exercise 11

**git commit --amend** (Slide 11)



Explain briefly why you should not amend public comments.

[Your answer]

## Exercise 12

**git merge** (Slide 58-62)

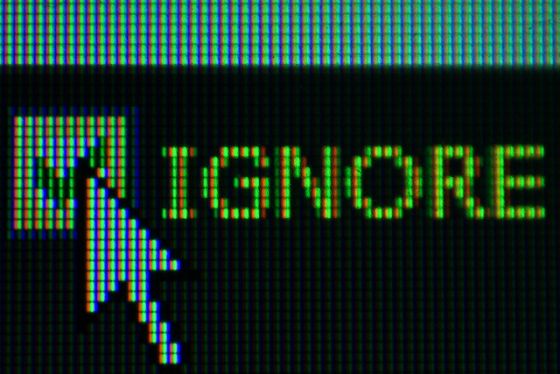


Explain briefly the difference between Fast-forward Merge and 3-way Merge.

[Your answer]

## Exercise 13

**Ignoring Files** (Slide 65)



Set the content of .gitignore file that git ignores files with the extentions of EXE and BAT.

[Your answer]

## Exercise 14

**Related Articles**



Search and find 3 beneficial online articles, videos, or etc. related to the material of this part of the course, and briefly describe the material you learned from them.

Link 1:

Subject:

What you learned:

[Your answer]

Link 2:

Subject:

What you learned:

[Your answer]

Link 3:

Subject:

What you learned:

[Your answer]

# Feedback

**Quiz**

1. In your opinion, how hard was the quiz?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Hard | Hard | Moderate | Easy | Very Easy |
|  |  |  |  |  |

2. Your feedback/suggestions/comments about the quiz.

[Answer here]

**Project**

3. In your opinion, how hard was the project?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Hard | Hard | Moderate | Easy | Very Easy |
|  |  |  |  |  |

4. Your feedback/suggestions/comments about the project.

[Answer here]

**Assignments**

5. In your opinion, how hard was the assignments?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Hard | Hard | Moderate | Easy | Very Easy |
|  |  |  |  |  |

6. Your feedback/suggestions/comments about the assignments.

[Answer here]

**Teacher**

7. How much satisfied you are about the teacher’s professional skills?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Satisfied | Satisfied | So-so | Unsatisfied | Very unsatisfied |
|  |  |  |  |  |

8. How much satisfied you are about the teacher’s skills to deliver the material in the lectures?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Satisfied | Satisfied | So-so | Unsatisfied | Very unsatisfied |
|  |  |  |  |  |

9. Your feedback/suggestions/comments for the teacher to improve himself.

[Answer here]

**Course**

10. How much satisfied you are about the course material?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Satisfied | Satisfied | So-so | Unsatisfied | Very unsatisfied |
|  |  |  |  |  |

11. How much satisfied you are about the course teaching method and structure?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Satisfied | Satisfied | So-so | Unsatisfied | Very unsatisfied |
|  |  |  |  |  |

12. Your feedback/suggestions/comments about the course.

[Answer here]

13. Your satisfaction percentages from everything related to this course (0-100).

[Answer here]

14. Were there any other material related to the course that you were looking forward to learn but they were not in the course material?

[Answer here]

15. Did you encounter any mistakes in the course material?

[Answer here]

16. Do you have any other feedback/suggestions/comments?

[Answer here]

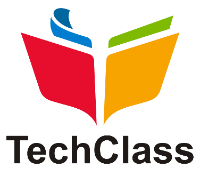
**You need to return this assignment before its deadline for your final assessment.**

**Good luck!** ☺ **Farhad Eftekhari**

Copyright © 2016 by Farhad Eftekhari

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, write to the publisher, addressed “Attention: Permissions Coordinator,” at the address below.

Helsinki Metropolia UAS  
Vanha maantie 6  
02650 Espoo, Finland  
www.techclass.co

  ****