Department of Computing

CS312: Advanced Programming

Lab 2: Matrix Operations

CLO2: Develop an appreciation for what is involved in learning

Date: September 12, 2018

Time: Thursday (10:00 - 12:50 & 14:00 – 16:50)

Instructor: Abid Rauf Lab Engineer: Ayesha Asif

Lab 02: Matrix Operations

Introduction

In this lab students will be divided into the groups of three to get the students familiarize with the working in the team.

Objectives

The main objective of this lab is to get the students familiarize with the working in the team and how to work in collaboration. Please read the complete lab before starting it.

Tools/Software Requirement

Visual Studio, GitHub.

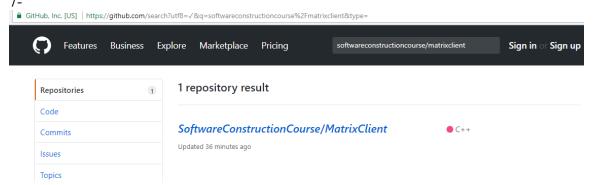
Description

Students will download the Skeleton project from the github and then work on project.

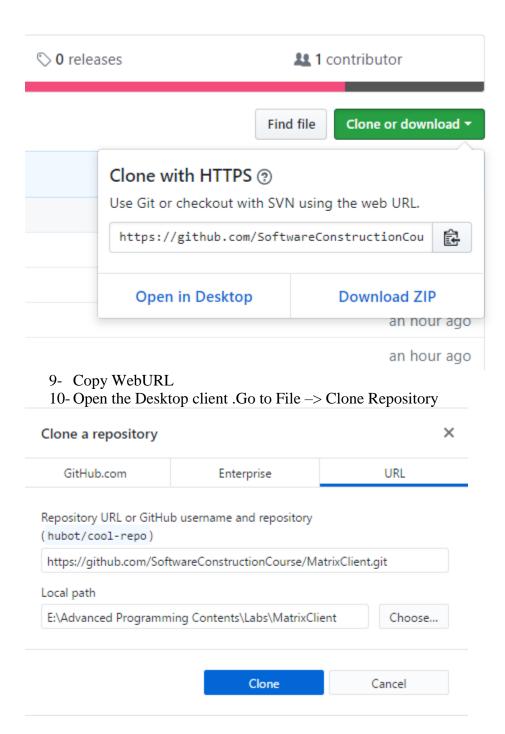
There will be three cpp files in the dll where each student will write its own part and will push it on the repository and then also merge the common part together.

Please follow the steps as mentioned below.

- 1- Go to the Web Site https://github.com/
- 2- Create your account at github.com
- 3- Download Desktop client from github.com
- 4- Install the Client Application
- 5- Login with your account
- 6- Find the repository by searching software construction course/matrix client on website



8- Click on the search result returned and on the next screen press the clone download button.



Enter the URL as posted above. https://github.com/SoftwareConstructionCourse/MatrixClient.git Select the Local path where you want to save the project and clone. Once its downloaded please divide the work as follows



- 1- Team member 1 will implement the Matrix Addition and Subtraction
- 2- Team member 2 will implement the Matrix Multiplication
- 3- Team member 3 will implement the Matrix Transpose.
- 4- Team members will implement the Client application that can use the dll.

Once every members have done its part. Now is the time to merge the code.

Ask your team lead to create its own repository on github

Initialize the repository.

Each member will push its changes on the repository.

The members will download the working code for the TA and then will show the working program.

Lab Tasks

In this Lab we have to create a C++ dll that can perform the following Matrix Operations Add a Matrix

Subtract a Matrix

Multiply a Matrix

Write down a Test client program that can use this dll.

Once every members have done its part. Now is the time to merge the code. Ask your team lead to create its own repository on GitHub. Initialize the repository. Each member will push its changes on the repository. The members will download the working code for the TA and then will show the working program.

Deliverables

Each submission is group based with the following composition:

- Source Code
- Documentation(Introduction, Approach, Design, How to Run and Analysis)
- Convert your submission file into a zip folder and name it as given below, finally upload the zip folder to LMS.
 - Name Registration No. Section