

## Part A – Java Environment Setup

### JDK Download

1. **Visit Oracle Java Download Page:**

<https://www.oracle.com/java/technologies/downloads/>

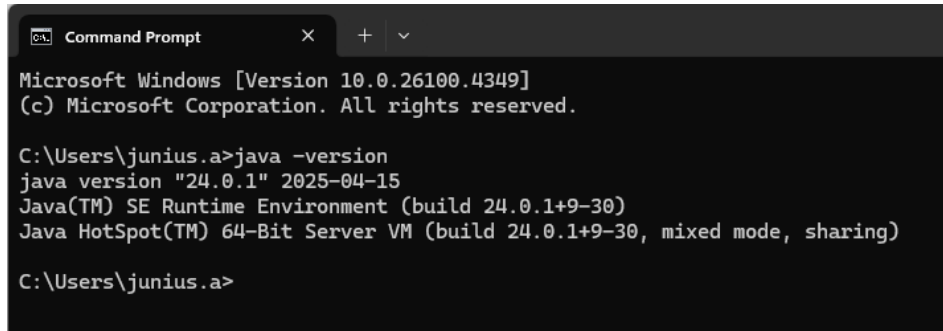
2. **Select Java Version:** Select the latest Java Development Kit (JDK) version
3. **Choose Your Operating System:** Click on the appropriate download link for your operating system (Windows, MacOS, Linux).
4. **Download the Installer:** For Windows select the link for the ‘x64 Installer’ to download the setup file named: *jdk-XX\_windows-x64\_bin.exe*
5. **Complete the Installation:** Once downloaded, run the *jdk-XX\_windows-x64\_bin.exe* file and follow the on-screen instructions to install Java.

The screenshot shows the Oracle Java Downloads page for JDK 24. The page has a dark header with the Oracle logo and navigation links: Products, Industries, Resources, Customers, Partners, Developers, Company. There are also search, language (US flag), and account links. Below the header, there are tabs for 'Tools and resources', 'Java downloads' (selected), and 'Java archive'. Under 'Java downloads', there are sub-tabs for 'JDK 24', 'JDK 21', 'GraalVM for JDK 24', and 'GraalVM for JDK 21'. The main content area is titled 'Java SE Development Kit 24.0.1 downloads'. It includes a disclaimer about the free use of JDK 24 binaries and a note about updates until September 2025. Below this, there are tabs for 'Linux', 'macOS', and 'Windows' (selected). A table lists the download options for Windows x64:

Product/file description	File size	Download
x64 Compressed Archive	229.51 MB	<a href="https://download.oracle.com/java/24/latest/jdk-24_windows-x64_bin.zip">https://download.oracle.com/java/24/latest/jdk-24_windows-x64_bin.zip</a> (sha256)
x64 Installer	205.85 MB	<a href="https://download.oracle.com/java/24/latest/jdk-24_windows-x64_bin.exe">https://download.oracle.com/java/24/latest/jdk-24_windows-x64_bin.exe</a> (sha256)
x64 MSI Installer	204.60 MB	<a href="https://download.oracle.com/java/24/latest/jdk-24_windows-x64_bin.msi">https://download.oracle.com/java/24/latest/jdk-24_windows-x64_bin.msi</a> (sha256)

## Verify JDK Installation (Java Version Check)

1. Open **Command Prompt**.
2. Check Java Version:
  - Type **java -version** in the command prompt.
  - Press Enter.



```
Microsoft Windows [Version 10.0.26100.4349]
(c) Microsoft Corporation. All rights reserved.

C:\Users\junius.a>java -version
java version "24.0.1" 2025-04-15
Java(TM) SE Runtime Environment (build 24.0.1+9-30)
Java HotSpot(TM) 64-Bit Server VM (build 24.0.1+9-30, mixed mode, sharing)

C:\Users\junius.a>
```

## Notepad++ Download

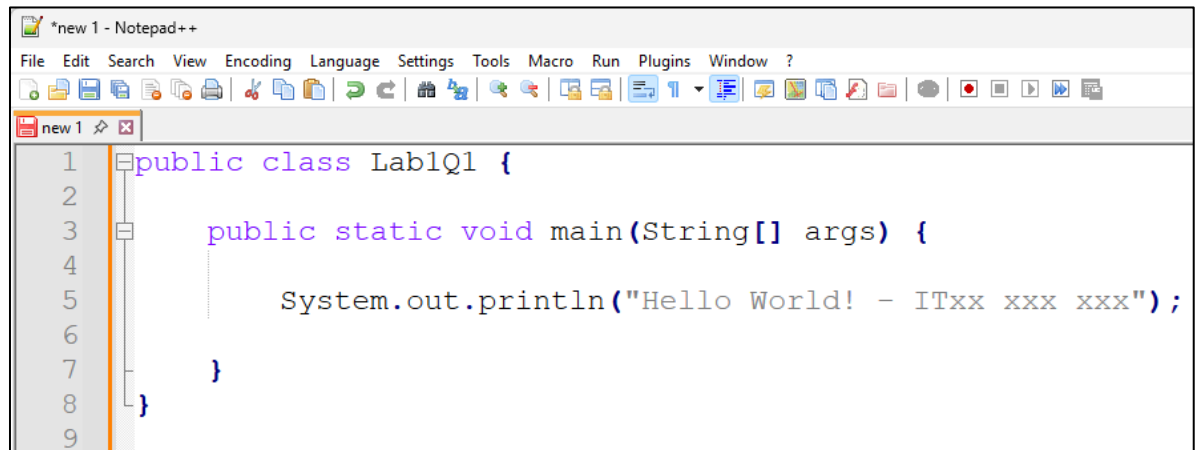
1. Visit Notepad++ Download Page: <https://notepad-plus-plus.org/downloads/>
2. **Download the Installer:** For Windows download the x64 Installer setup file named:  
*npp.X.X.X.Installer.x64.exe*
3. **Complete the Installation:** Once downloaded, run the *npp.X.X.X.Installer.x64.exe* file and follow the on-screen instructions to install Notepad++.



## Part B – Java Hello World Program

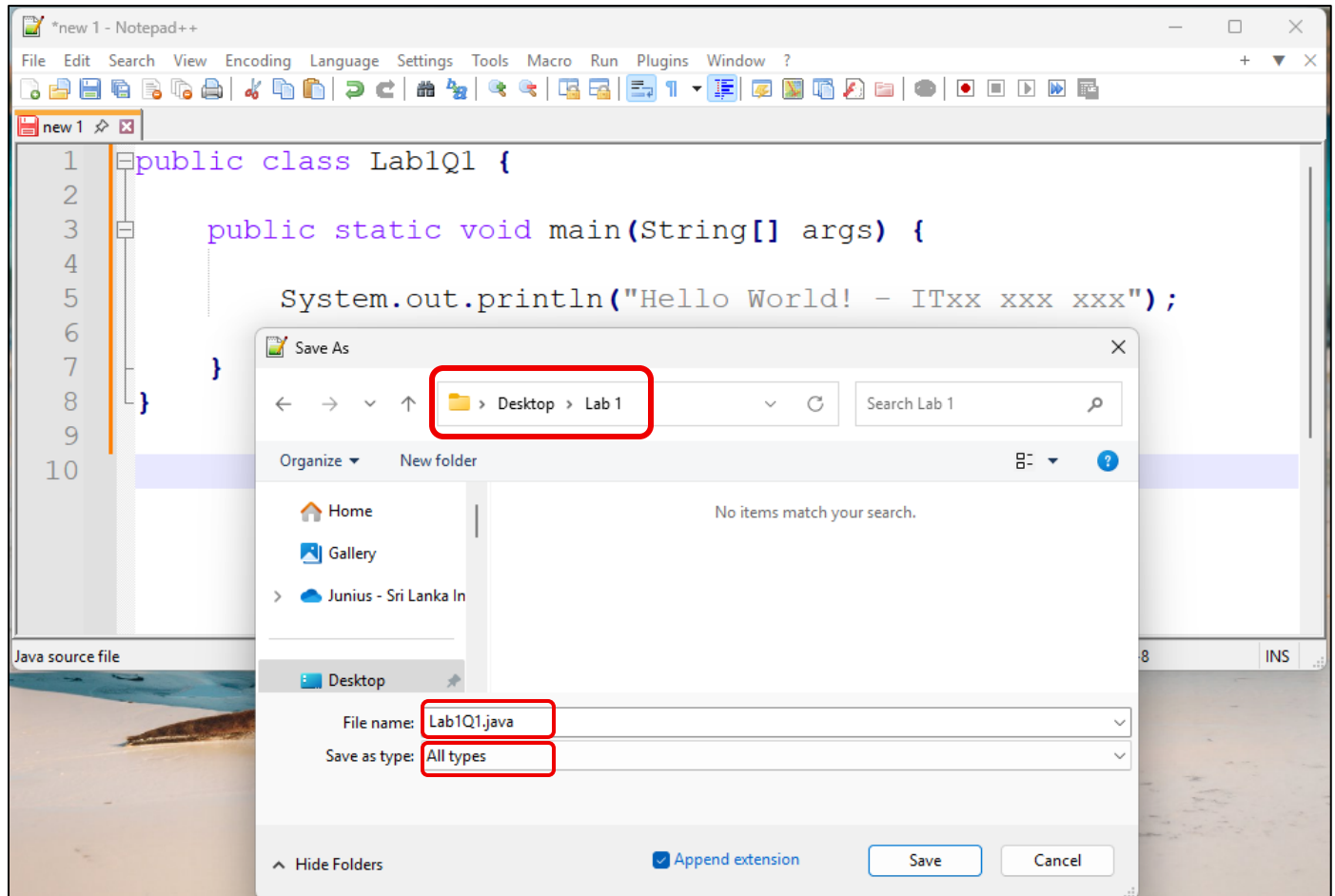
- **Create a Folder:**
  - In Desktop of your computer
  - Create a New Folder named: ‘**Lab 1**’
- **Open Notepad++:** Start Notepad++ on your computer to begin writing your program.
- **Hello World Program:**
  - In Notepad++, write the first Hello World Java program, copy and paste below code:

```
public class Lab1Q1 {  
    public static void main(String[] args) {  
        System.out.println("Hello World! - ITxx xxx xxx");  
    }  
}
```



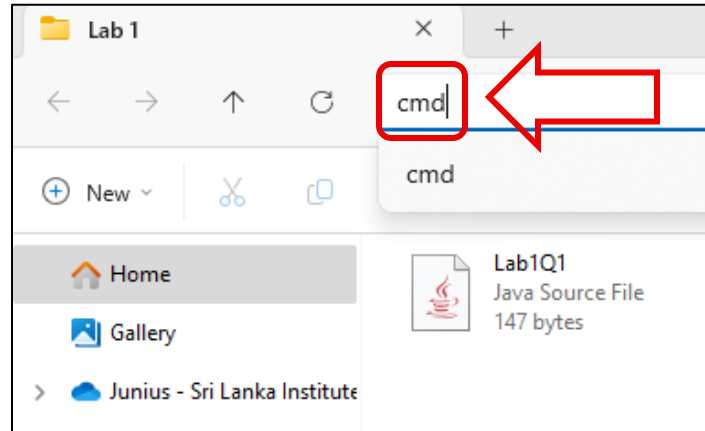
- Replace ‘ITxx xxx xxx’ in line 5 above code, with your own Student ID.

- Save the file inside 'Lab 1' folder as: **Lab1Q1.java** make sure to select 'All types' under 'Save as type'.

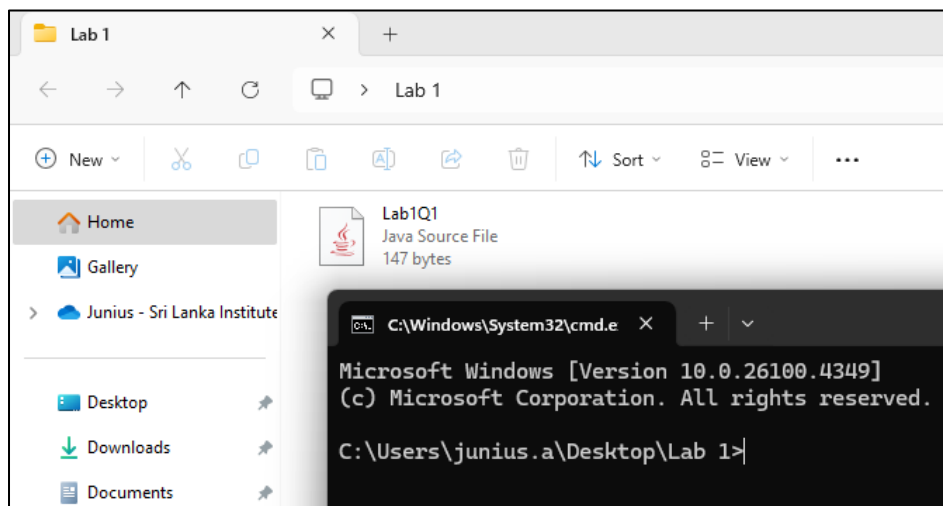


- **Open Command Prompt inside ‘Lab 1’ Folder:**

- Inside ‘Lab 1’ folder, type **cmd** in the *address bar* of File Explorer and press Enter.

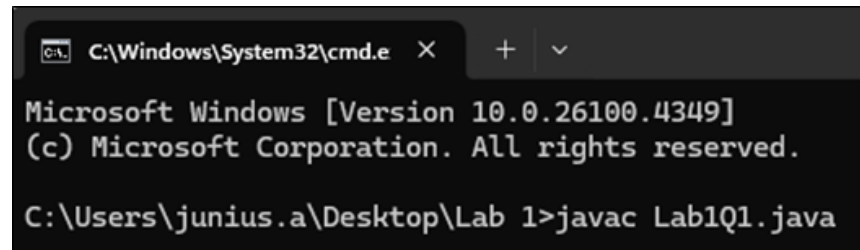


- This will open Command Prompt with the path set to the ‘Lab 1’ folder.



- **Compile the Program:**

- Compile the Java program typing: **javac Lab1Q1.java**

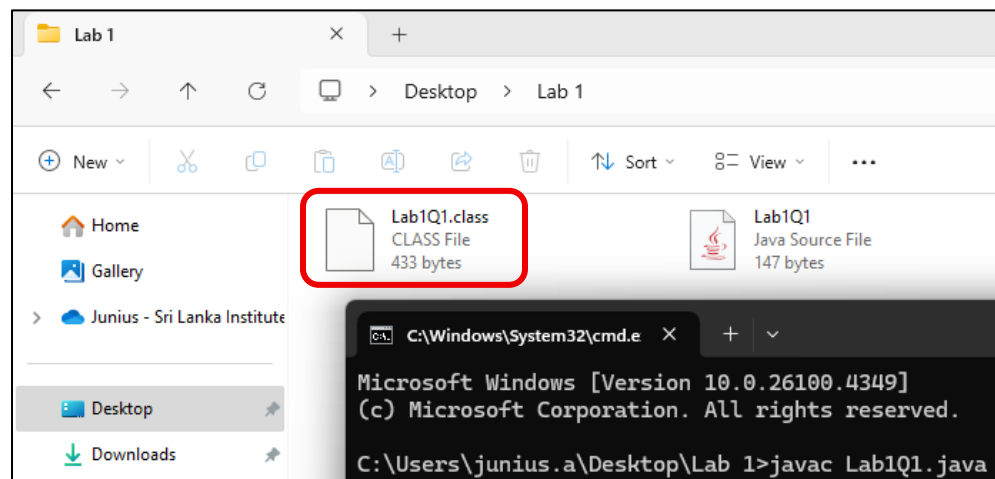


```
C:\Windows\System32\cmd.e X + v
Microsoft Windows [Version 10.0.26100.4349]
(c) Microsoft Corporation. All rights reserved.

C:\Users\junius.a\Desktop\Lab 1>javac Lab1Q1.java
```

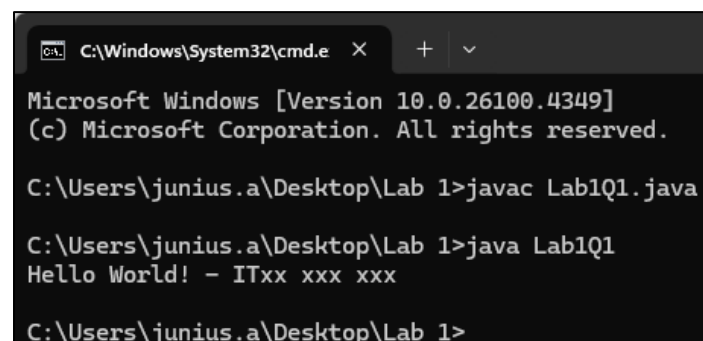
- **Bytecode (.class file) Generated:**

- Verify that **Lab1Q1.class** appears in the folder, indicating successful compilation.



- **Run the Program:**

- In command prompt, type: **java Lab1Q1** to run your program.



```
C:\Windows\System32\cmd.e X + v
Microsoft Windows [Version 10.0.26100.4349]
(c) Microsoft Corporation. All rights reserved.

C:\Users\junius.a\Desktop\Lab 1>javac Lab1Q1.java

C:\Users\junius.a\Desktop\Lab 1>java Lab1Q1
Hello World! - ITxx xxx xxx

C:\Users\junius.a\Desktop\Lab 1>
```

Finally, you need to upload the Java Source File (.java file) to GitHub Repository (next page).

## Part B – Lab Submission to GitHub

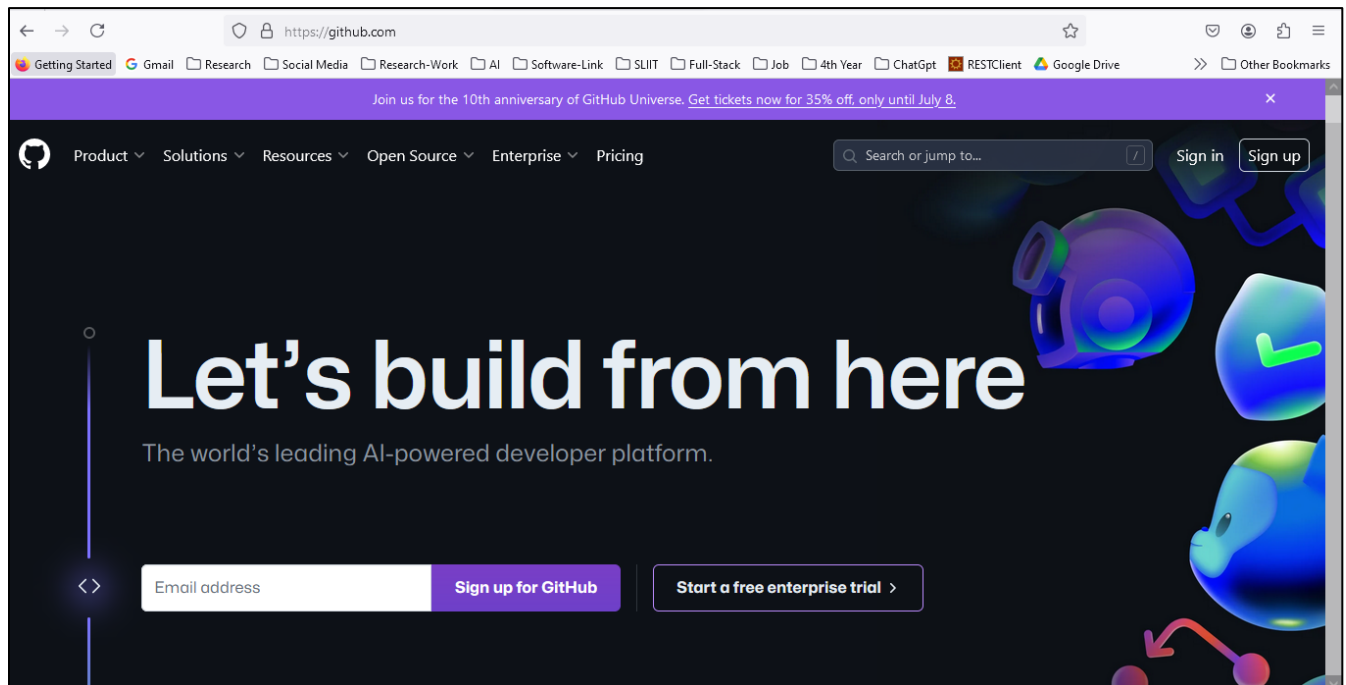
### GitHub Account Creation

#### Step 1: Go to GitHub Website

- Open your web browser and navigate to: <https://github.com/>

#### Step 2: Sign Up

- Click ‘Sign Up’ button, typically located in the top right corner of the homepage.
- This will redirect you to the registration page.



### Step 3: Signup Details

- **Email Address:** Enter a your SLIIT email address.
- **Password:** Create a strong password, ideally at least 15 characters long or at least 8 characters including a mix of letters, numbers, and symbols.
- **Username:** Enter your student ID as the username (e.g., IT2423233). **Make sure to type IT in CAPS of your Student ID.**

The screenshot shows the GitHub 'Welcome to GitHub!' signup page. It includes fields for email, password, and username, along with email preferences. Red annotations highlight the required SLIIT email format and student ID for the username.

Welcome to GitHub!  
Let's begin the adventure

Enter your email\*

Enter Your SLIIT Email Address (it2423233@my.sliit.lk)

Create a password\*

✓ .....

Enter a username\*

Enter Your SLIIT Student Number (IT2423233)

Email preferences

☐ Receive occasional product updates and announcements.

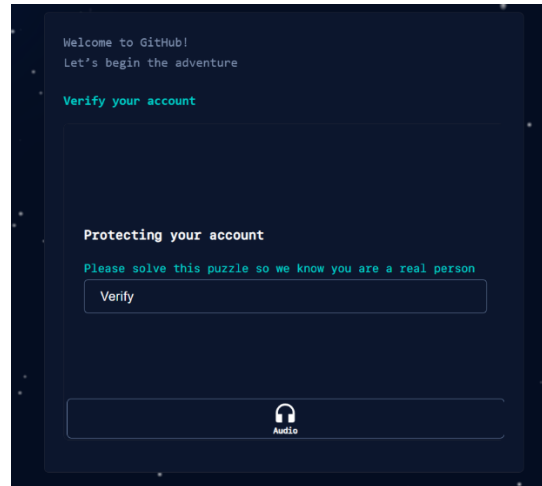
Continue

By creating an account, you agree to the [Terms of Service](#). For more information about GitHub's privacy practices, see the [GitHub Privacy Statement](#). We'll occasionally send you account-related emails.



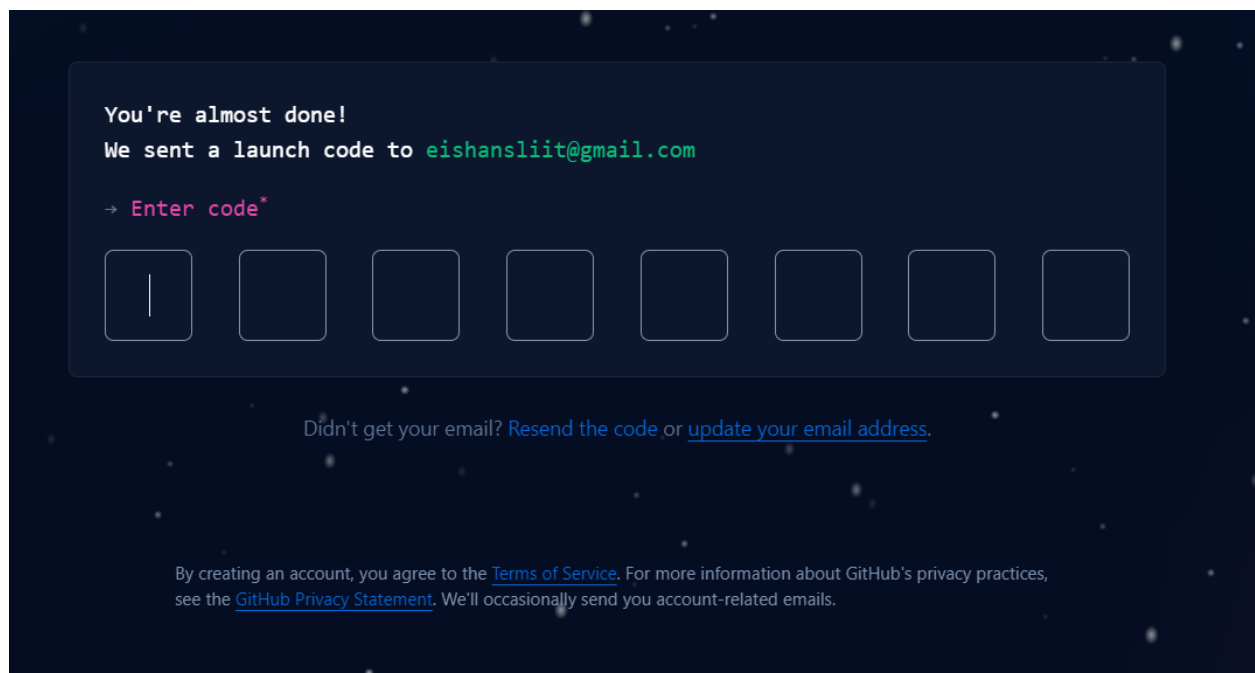
## Step 4: Verify your Account

- Complete the CAPTCHA challenge to confirm that you are not a robot.



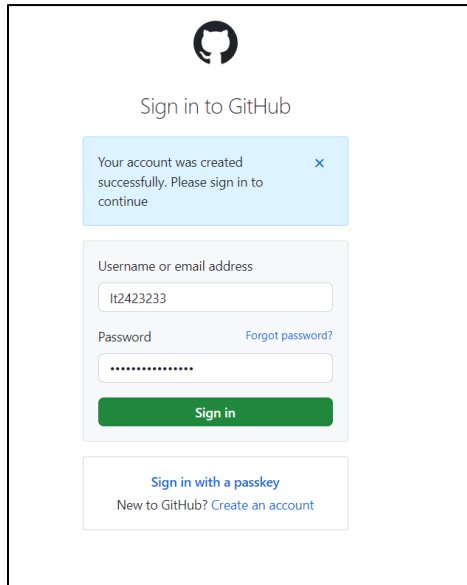
## Step 5: Verify your Email address

- Check your email inbox for a verification email from GitHub.
- Click the provided link to verify your email address.



## Step 6: Sign in to the GitHub

- Enter your username and password

The image shows the GitHub sign-in page. At the top is the GitHub logo. Below it is the text "Sign in to GitHub". A light blue notification box states: "Your account was created successfully. Please sign in to continue" with a close button (X). Below this is a form with two input fields: "Username or email address" containing "It2423233" and "Password" with masked characters. A "Forgot password?" link is next to the password field. A green "Sign in" button is below the fields. At the bottom, there is a link "Sign in with a passkey" and a link "New to GitHub? Create an account".

Sign in to GitHub

Your account was created successfully. Please sign in to continue

Username or email address  
It2423233

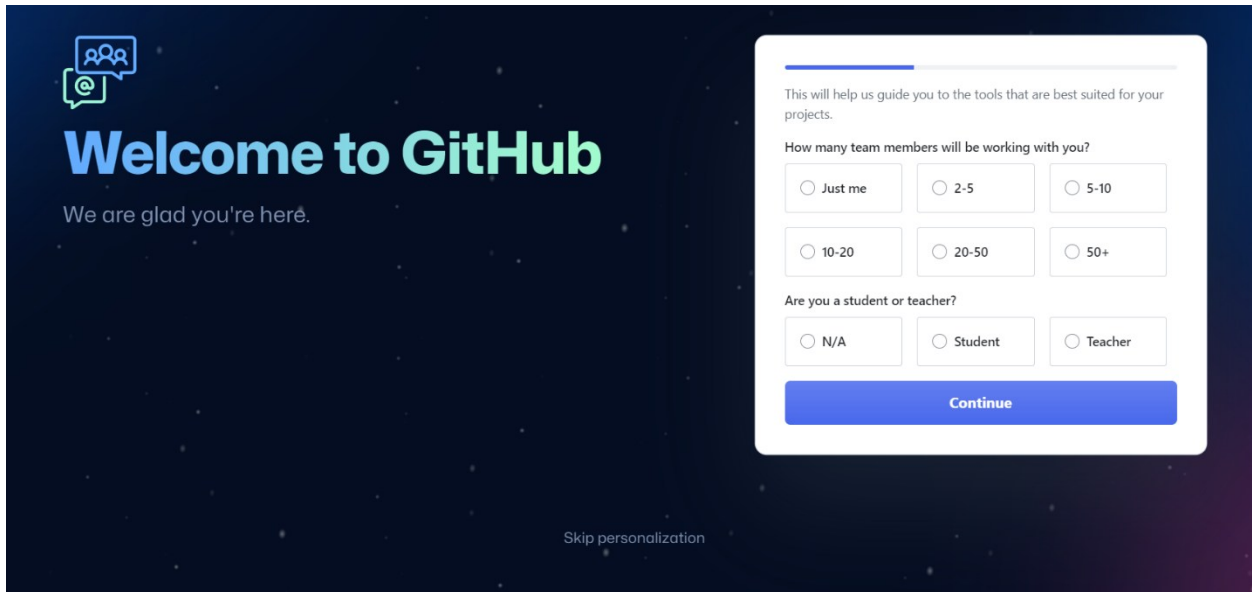
Password [Forgot password?](#)  
.....

Sign in

[Sign in with a passkey](#)  
[New to GitHub? Create an account](#)

## Step 7: Set up your Profile

- If you want, you can do the personalization for this account or you can skip this step by clicking the skip personalization.

The image shows the GitHub welcome screen. On the left, there is a "Welcome to GitHub" message with a subtext "We are glad you're here." and a "Skip personalization" link at the bottom. On the right, there is a white box with a progress bar at the top. The text inside says "This will help us guide you to the tools that are best suited for your projects." Below this is a question "How many team members will be working with you?" with six radio button options: "Just me", "2-5", "5-10", "10-20", "20-50", and "50+". Below that is another question "Are you a student or teacher?" with three radio button options: "N/A", "Student", and "Teacher". A blue "Continue" button is at the bottom of the white box.

Welcome to GitHub

We are glad you're here.

Skip personalization

This will help us guide you to the tools that are best suited for your projects.

How many team members will be working with you?

☐ Just me ☐ 2-5 ☐ 5-10

☐ 10-20 ☐ 20-50 ☐ 50+

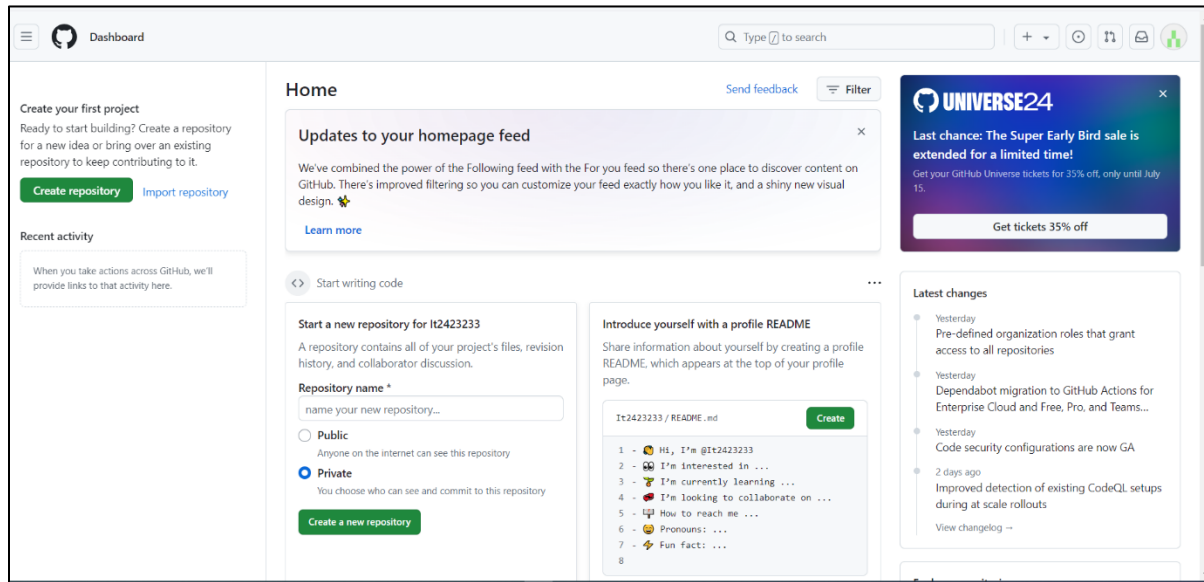
Are you a student or teacher?

☐ N/A ☐ Student ☐ Teacher

Continue

## Step 8: Start using GitHub

- Your account is now ready. You can begin by creating repositories, participating in projects, and exploring the work of other GitHub users.



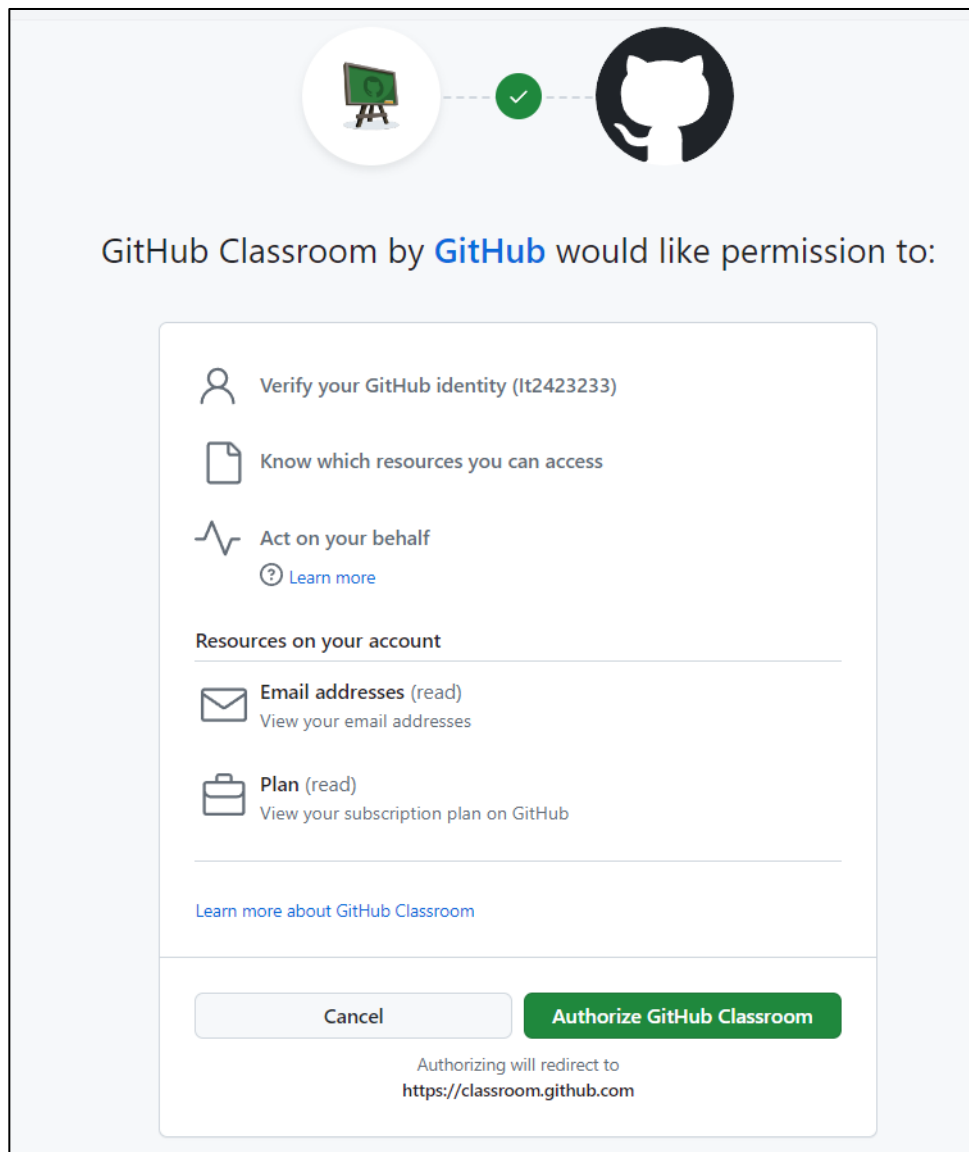
## Submitting Lab Source Files to GitHub

### Step 1: Open the Assignment Link

- Courseweb will provide the link to GitHub Classroom assignment submission page.

### Step 2: Authorize GitHub Classroom

- If it's your first-time using GitHub Classroom, you may be prompted to authorize GitHub Classroom to access your GitHub account.
- Click on the '*Authorize GitHub Classroom*' button to proceed.



### Step 3: Select the student IT Number in the list

Join the classroom:

**IP-Test-Group-Name-Here**

To join the GitHub Classroom for this course, please select yourself from the list below to associate your GitHub account with your school's identifier (i.e., your name, ID, or email).

[Can't find your name? Skip to the next step →](#)

Identifiers
IT1313136 >
IT1313137 >
IT1313138 >
IT1313139 >
IT1313140 >
IT1313141 >
IT2423233 >

### Step 4: Accept the Assignment

- After Selecting the IT Number, you will be directed to the assignment acceptance page.
- Click on the 'Accept this assignment' button.
- GitHub Classroom will start setting up your repository. This process may take a few moments.

IP-Test-Group-Name-Here

Accept the assignment —

**IT1120 - Lab 01**

Once you accept this assignment, you will be granted access to the `it1120-lab-01-It2423233` repository in the [SLIIT-IP](#) organization on GitHub.

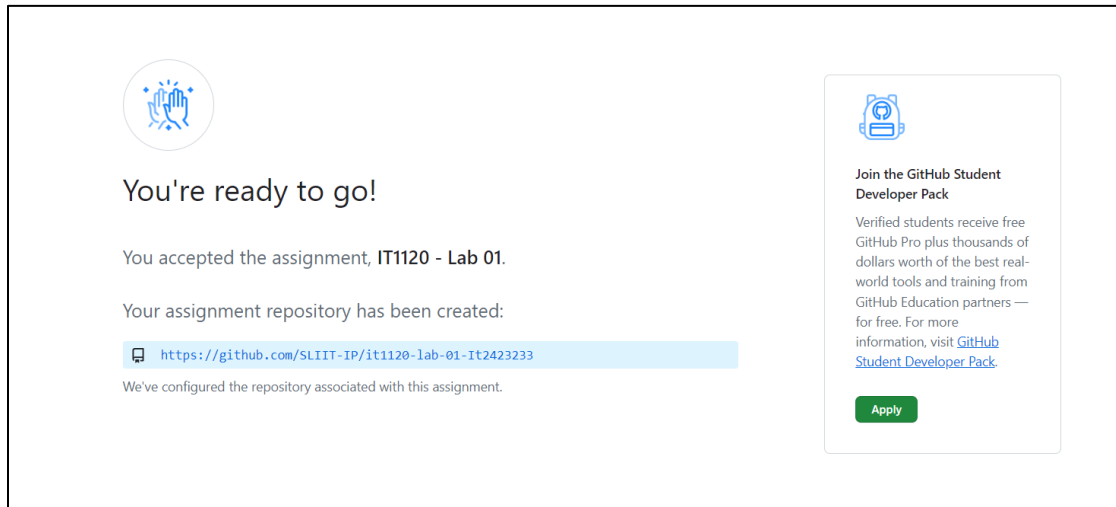
[Accept this assignment](#)

## Step 5: Access Your Repository

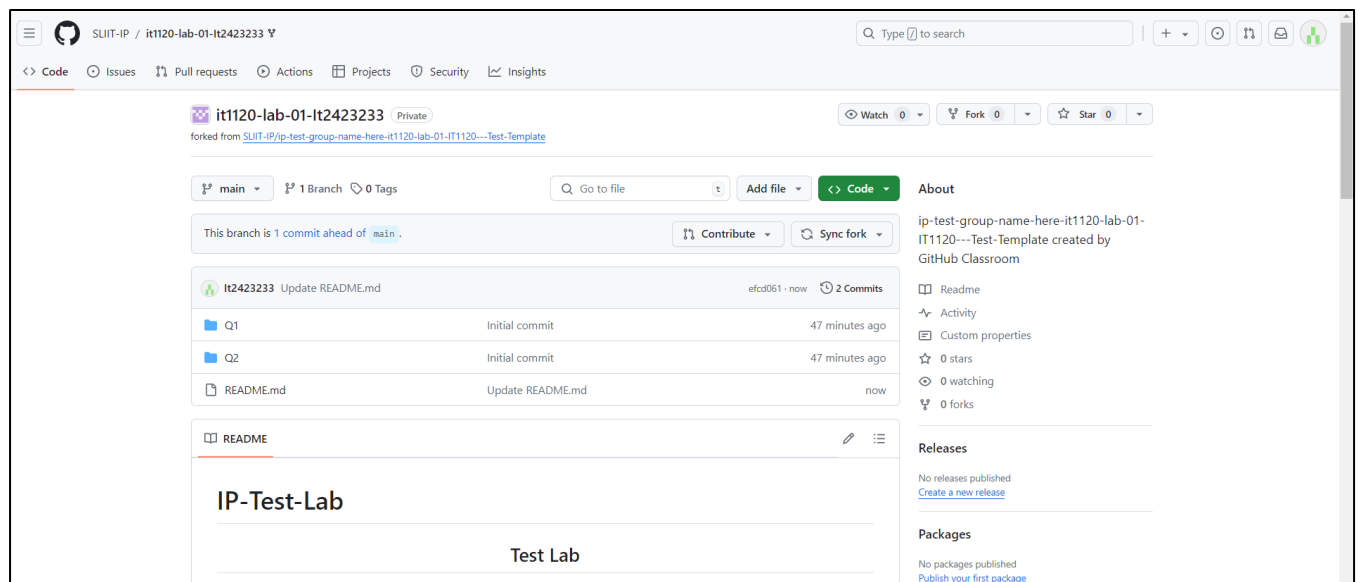
- The URL of your Git Repository will be in following format:

*[https://github.com/organization\\_name/assignment\\_name-username](https://github.com/organization_name/assignment_name-username)*

- Bookmark or save this URL for easy access in future lab submissions.**

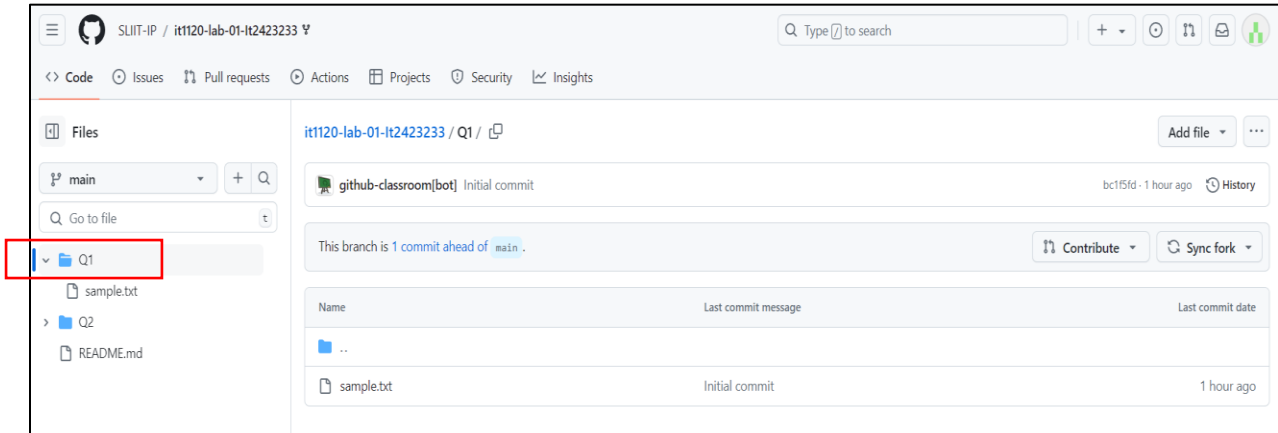


- Clicking the generated URL of your repository it will be redirected to your newly created GitHub repository



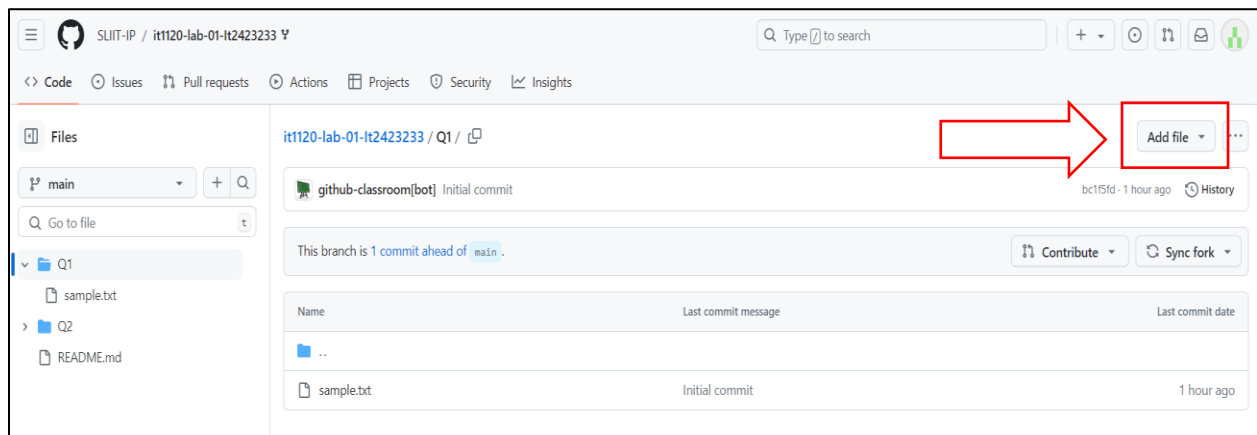
## Step 6: Access the Folder you want to submit the answer

- In the repository, locate the ‘Q1’ folder by clicking on it. This will take you inside the folder.



## Step 7: Upload the Java Files

- Inside the ‘Q1’ folder, click on the ‘Add file’ button located at the top right corner.
- Choose ‘Upload files’ from the dropdown menu.
- Drag and drop your **Lab1Q1.java** file or select ‘choose your files’ link to navigate to your file saved in your computer.
- Once the file is selected, it will be uploaded to the GitHub Repository.



## Step 8: Commit the File

- After uploading the file, you will be directed to a ‘Commit change’ section at the bottom of the page.
- Enter a commit message in the input box provided. Sample commit message could be something like: ‘*Add Lab1Q1.java to Q1*’.
- Ensure that you select ‘*Commit directly to the main branch*’ option.
- Click on ‘Commit changes’.

it1120-lab-01-It2423233 / Q1

Drag additional files here to add them to your repository  
Or [choose your files](#)

HelloWorld.java

**Commit changes**

Add HelloWorld.java to Q1

Add an optional extended description...

☒ Commit directly to the `main` branch.

☐ Create a new branch for this commit and start a pull request. [Learn more about pull requests.](#)

**Commit changes** Cancel

## Step 9: Verify Submission

- After committing the changes, GitHub will return you to the folder view where you can see your newly uploaded **Lab1Q1.java** file inside the ‘Q1’ folder.
- Make sure the file is correctly placed and contains the appropriate content.