



INDIAN INSTITUTE OF
INFORMATION TECHNOLOGY, NAGPUR

SMART INDIA HACKATHON -2020



CATEGORY – SOFTWARE

TEAM NAME- BITS N BYTES

TEAM NO.- 05

TEAM LEADER- GOPAL PANDEY

TEAM MEMBERS-

1.PULKIT BATRA

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COLLEGE SPOC – DR. TAPAN KUMAR JAIN

PROBLEM STATEMENT: Creating a Automatic Student Registration Software that access data and creates a automatic filled form of the student information and generates a PDF of the same.

SOFTWARE USED:-

1. Selenium
2. Gecko Driver for Firefox
3. PHPMyAdmin.

PROGRAMMING LANGUAGES USED:-

1. Python
2. Java Script
3. HTML
4. CSS
5. PHP
6. SQL [For Database Management]

SELENIUM



What is Selenium?

Selenium is a portable framework for testing web applications. Selenium provides a playback tool for authoring functional tests without the need to learn a test scripting language (Selenium IDE). It also provides a test domain-specific language (Selenese) to write tests in a number of popular programming languages, including C#, Groovy, Java, Perl, PHP, Python, Ruby and Scala. The tests can then run against most modern web browsers. Selenium runs on Windows, Linux, and macOS. It is open-source software released under the Apache License 2.0.

Components of Selenium :-

1. Selenium IDE

Selenium IDE is a complete integrated development environment (IDE) for Selenium tests. It is implemented as a Firefox Add-On and as a Chrome Extension. It allows for recording, editing and debugging of functional tests.

2. Selenium WebDriver

Selenium WebDriver is the successor to Selenium RC. Selenium WebDriver accepts commands (sent in Selenese, or via a Client API) and sends them to a browser. This is implemented through a browser-specific browser driver, which sends commands to a browser and retrieves results.

3. Selenium Remote Control

Selenium Remote Control (RC) is a server, written in Java, that accepts commands for the browser via HTTP. RC makes it possible to write automated tests for a web application in any programming language, which allows for better integration of Selenium in existing unit test frameworks. To make writing tests easier, Selenium project currently provides client drivers for PHP, Python, Ruby, .NET, Perl and Java.

Gecko Driver For FireFox

GeckoDriver is a web browser engine which is used in many applications developed by Mozilla Foundation and the Mozilla Corporation. GeckoDriver is the link between your tests in Selenium and the Firefox browser.



PHP MyAdmin



PHPMyAdmin is a free software tool written in PHP, intended to handle the administration of MySQL over the Web. phpMyAdmin supports a wide range of

operations on MySQL and MariaDB. Frequently used operations (managing databases, tables, columns, relations, indexes, users, permissions, etc) can be performed via the user interface, while you still have the ability to directly execute any SQL statement.

PROPOSED SYSTEM :-

1. First we access the data stored in the excel sheet.

2. Filtering the accessed data with the help of Regex.

The Regex Filter transform filters messages in the data stream according to a regular expression (regex) pattern, which you can define. You also define the filter to either accept or deny incoming messages based on the regular expression. For example, if an incoming message contains the regular expression, and you define the filter to deny incoming messages based on the regular expression, the filter then discards any incoming messages that contain the regular expression.

3. Through Python With the Help of Selenium transporting the accessed data to the HTML form.

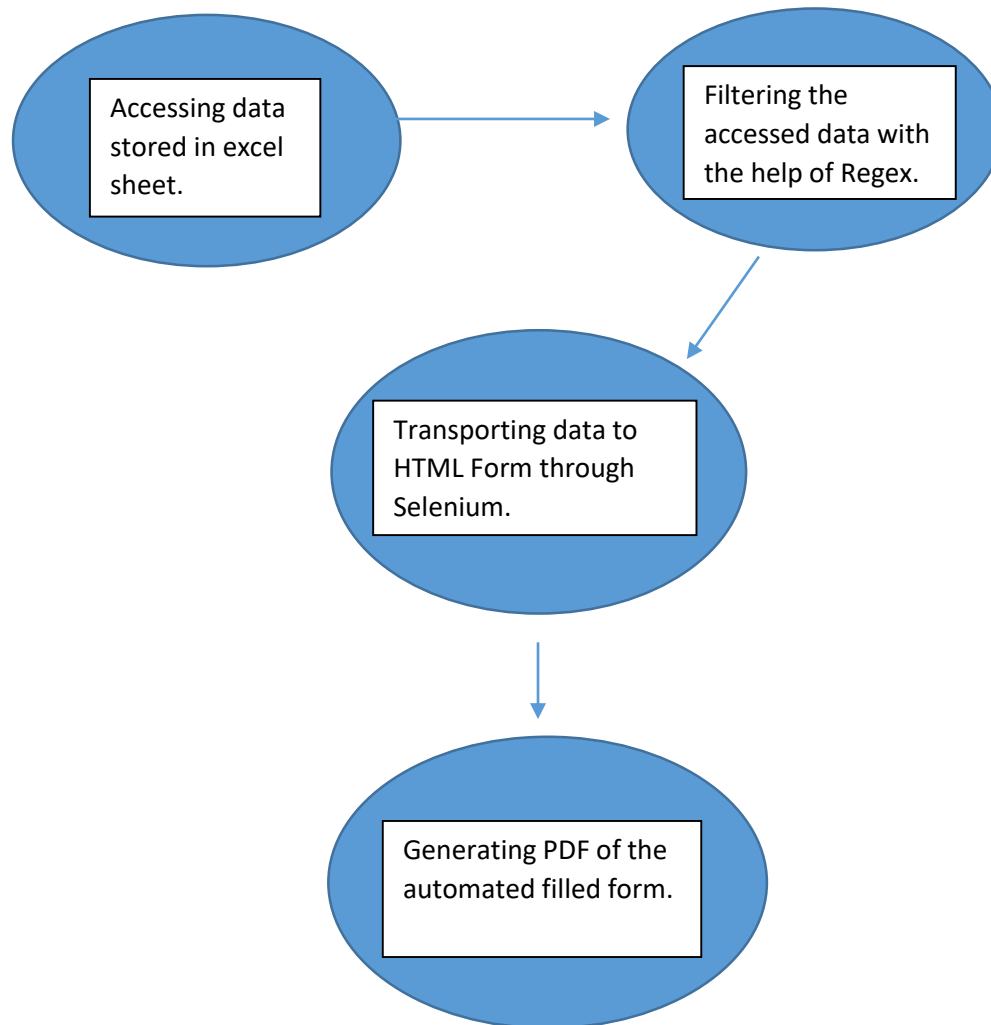
Library imported - `from selenium import webdriver`

(i) Selenium library:

- Used for Automation.
- Control Webdriver.
- Perform actions like - element clicks, refresh page, goto website link, etc.

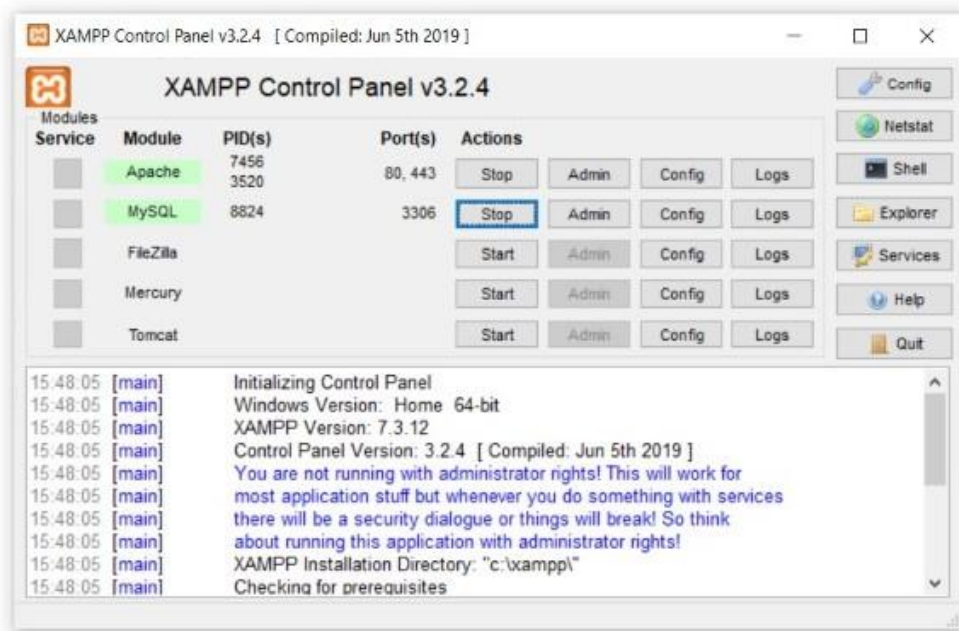
4. By pressing the Submit button in the automated filled form a PDF can be generated of the details filled along with photograph of the candidate.

FLOWCHART OF THE ABOVE MENTIONED PROCESS :-

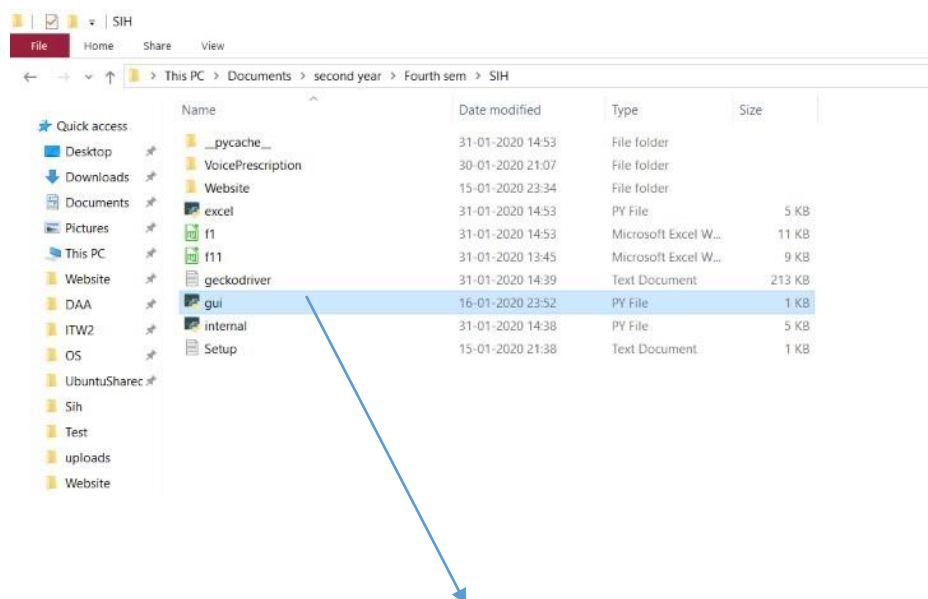


CONTROL FLOW :-

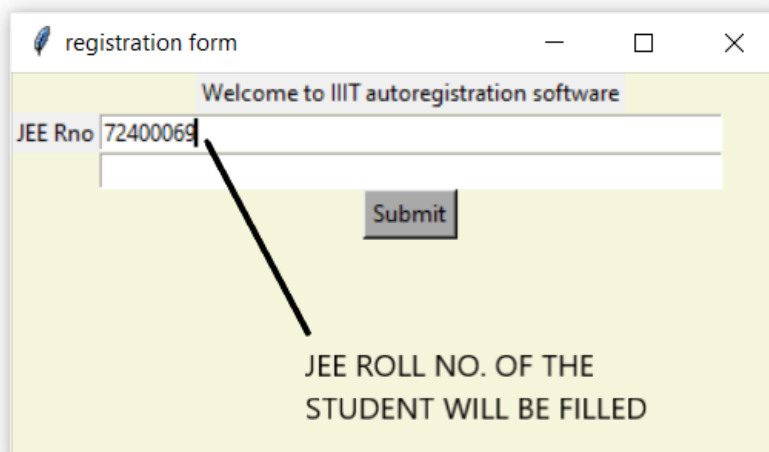
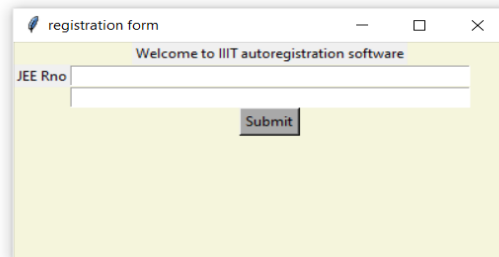
1. XAMPP :- Sets up a server of Apache and MySQL to host the PHP form and database.



2. The file gui.py is the registration form window along with JEE Roll No.



3. Displaying the registration form window.



- A window will be opened . After filling the JEE Roll No. the details of that student will appear in the automated filled form.

4. The automated filled form with the help of Selenium will appear on the screen along with the details of the student.

Registration Form

localhost/Sih/reg_form.php

Student's Name: Gopal Pandey NON EDITABLE FIELD

Father's Name: Abhishek Pandey EDITABLE FIELD

Mother's Name: Manisha Pandey EDITABLE FIELD

Date of Birth: 2000/04/27 NON EDITABLE FIELD

Registration Form

localhost/Sih/reg_form.php

JEE Roll Number: 72400002 NON EDITABLE FIELD

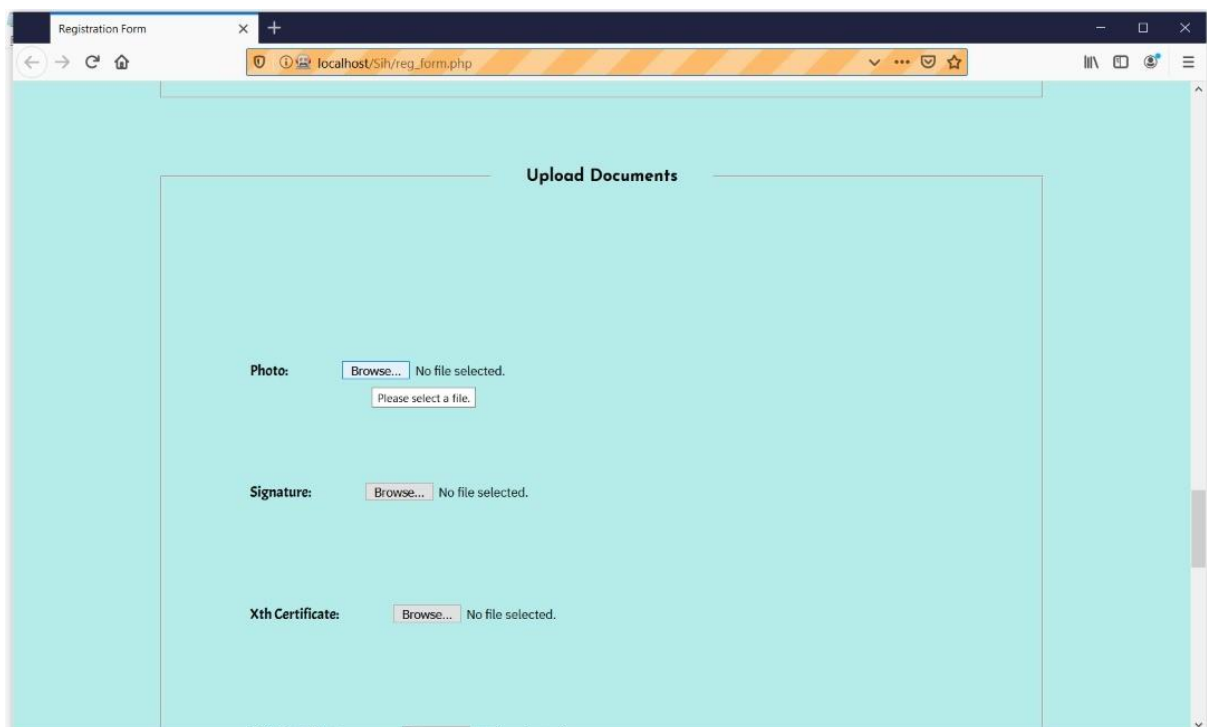
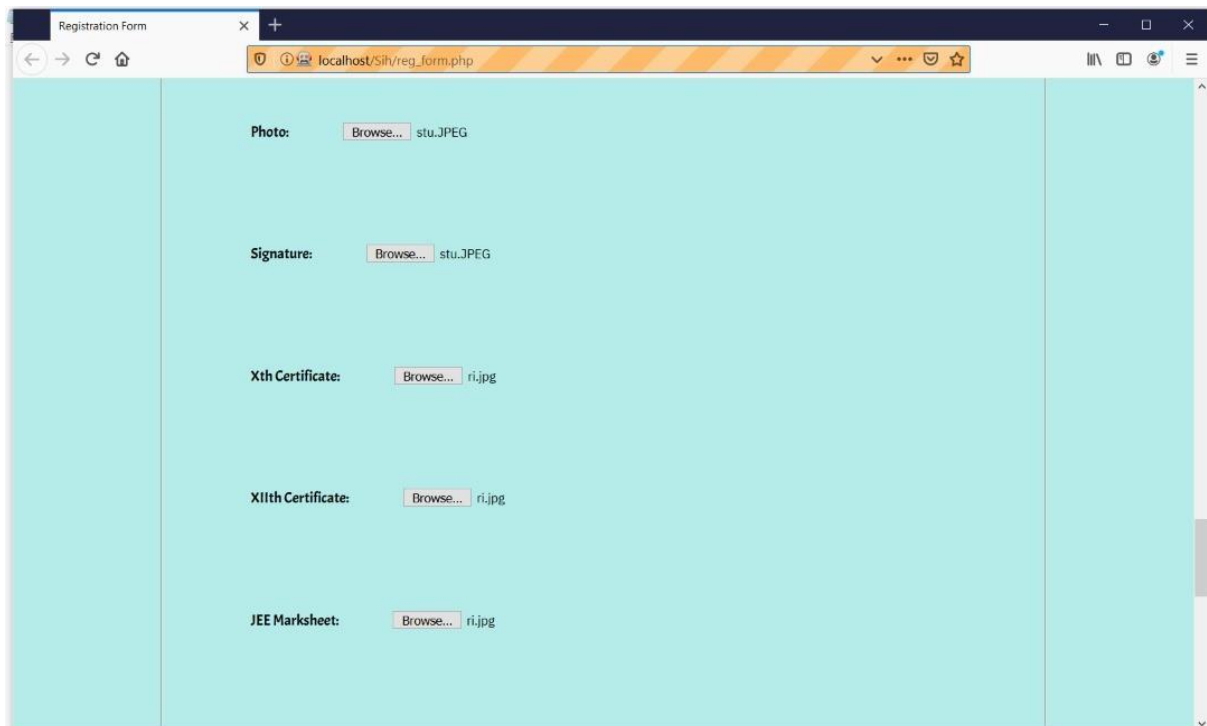
JEE Mains AIR: 43000 NON EDITABLE FIELD

10th Percentage: 89.3 NON - EDITABLE FIELD

12th Percentage: 98.6 NON EDITABLE FIELD

Branch: ECE NON EDITABLE FIELD

Semester: 1 NON EDITABLE FIELD



Registration Form

localhost/Sih/reg_form.php

Migration Certificate: No file selected.

Payment Receipt: No file selected.

PWD Certificate (If Applicable): No file selected.

Gap Certificate (If Applicable): No file selected.

We have categorized the data in two categories:-

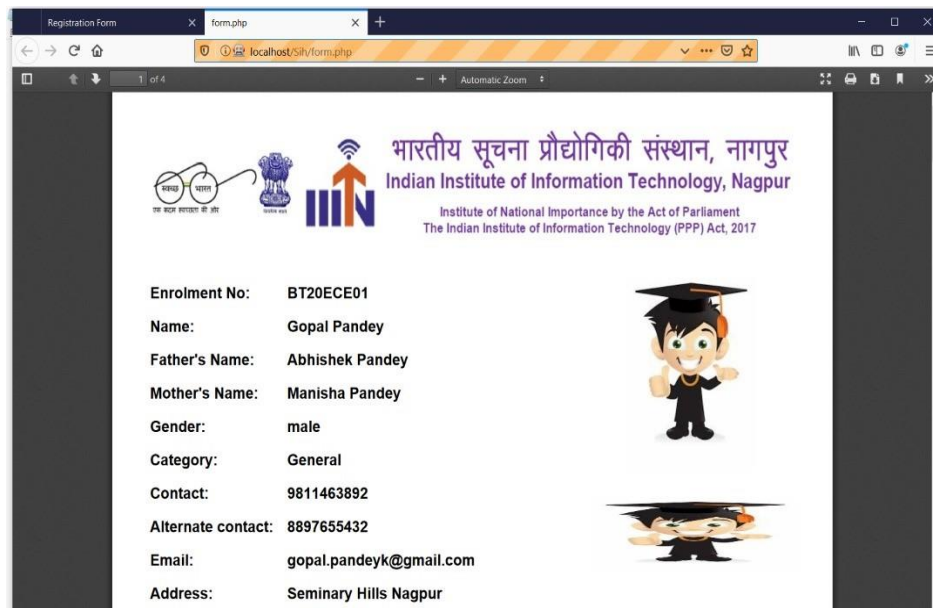
1. **NON EDITABLE FIELDS**

- Student Name
- Date Of Birth
- Gender
- Category
- Aadhar No.
- JEE ROLL NO.
- JEE Rank
- 10th and 12th percentage
- Branch

2. **EDITABLE FIELDS**

- Father Name
- Mother Name
- Mobile No.
- Email ID
- Address

5. After clicking the Submit button the PDF will be generated of the details of the student along with passport photograph and signature of the student.



Registration Form

form.php

localhost/silv/form.php

Automatic Zoom

भारतीय सूचना प्रौद्योगिकी संस्थान, नागपुर
Indian Institute of Information Technology, Nagpur
Institute of National Importance by the Act of Parliament
The Indian Institute of Information Technology (PPP) Act, 2017

Enrolment No: BT20ECE01

Name: Gopal Pandey

Father's Name: Abhishek Pandey

Mother's Name: Manisha Pandey

Gender: male

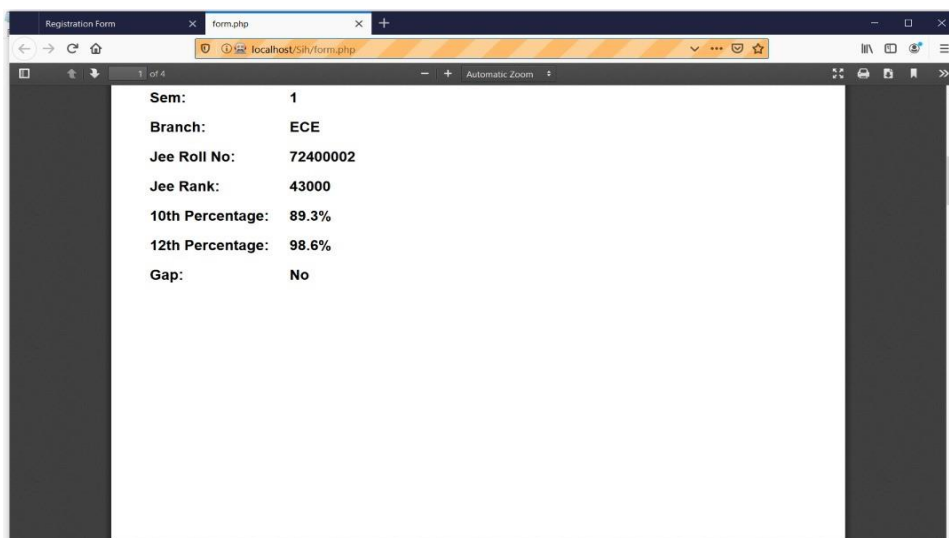
Category: General

Contact: 9811463892

Alternate contact: 8897655432

Email: gopal.pandeyk@gmail.com

Address: Seminary Hills Nagpur



Registration Form

form.php

localhost/silv/form.php

Automatic Zoom

Sem: 1

Branch: ECE

Jee Roll No: 72400002

Jee Rank: 43000

10th Percentage: 89.3%

12th Percentage: 98.6%

Gap: No

LIMITATIONS:-

1. Data is not encrypted .
2. The data in the excel sheet need to be filled in a precise manner.