StuWin

User Manual: StuWin

Getting Started and Features Guide

1. Introduction

Welcome to the **StuWin User Manual** - your comprehensive guide to installing, navigating, and using the features of the StuWin platform.

StuWin is a locally hosted academic support platform developed by students at Columbia College. It is designed to help students stay organized, manage academic goals, and improve their overall performance through intelligent planning and real-time feedback.

StuWin enables users to:

- Set and track GPA goals for each course
- Input assessment scores and visualize performance through graphs
- Receive AI-generated study schedules using Gemini API
- Get personalized reminders for assignments, quizzes, and exams
- Sync tasks and deadlines with their Outlook calendar
- Store important notes and academic documents for long-term access
- Reflect on progress through a built-in journaling system

This manual is intended for:

- Columbia College students using the StuWin system for the first time
- Faculty or testers reviewing the application as part of a course evaluation
- Any user who has received the complete StuWin folder and wants to run the application locally

2. Before Getting Started

We sincerely thank you for using and trusting our website: StuWin for your academic success! We are excited to help you serve and cannot wait to see your success. We'll help you set up your journey!

This user manual is intended to help you and help you understand all features we have to offer. This guide helps you to set up StuWin website on your computer as LOCAL HOST only. The guide helps you step by step with all steps including installing the required dependencies and models needed.

Please follow all the instructions and steps very carefully. We do not take any responsibility if anything goes wrong during installation steps. However, to help you, we have provided you with screenshots of necessary steps that you might need help with!

No prior programming knowledge is assumed. This guide walks through everything from setup and installation to day-to-day usage and troubleshooting.

GOOD LUCK WITH YOUR ACADEMIC JOURNEY!

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3. Getting Started

This section helps you to see the basic things you need to run our software.

3.1 System Requirements:

- Hardware Requirements:

Component	Minimum Requirement	Recommended
Processor	Intel Core i3 or equivalent	Intel Core i5 or better
RAM	4 GB	8 GB or higher
Storage	1 GB free disk space	SSD with 3+ GB space
Network	Stable Internet (for API access)	Broadband connection

- Software Requirements:

Component	Required Version	Notes
Operating System	Windows 10 / 11	Mac/Linux not officially supported yet
Python	Version 3.10 or above	Must be added to system PATH
Pip	25.x	Used to install libraries
Visual Studio Code (VSCode)	Latest	Optional but recommended for editing and running code. Notepad or other IDE can be used
Web Browser	Any Modern Browser	Chrome recommended for compatibility
MySQL Server (Localhost)	8.x	Used for database (MySQL root password: Simran)

3.2 Folder Structure:

After downloading the complete StuWin directory and extracting to your desired path (for our example, let's say we use 'C:\Users\asus\Downloads\StuWin', you will find the following folder structure.

Each file and folder serve a specific purpose within the application, so don't delete anything please.

Name / Folder	Description
app.py	The main Flask application file. Running this file starts the website.
venv/	The Python virtual environment. Contains isolated libraries and executables. **Do not edit.** Automatically gets created.
credentials.json	Google API credentials used for Drive, Calendar, and OAuth integration. **Do not delete or change.**
uploads/	Temporary directory to store uploaded files before sending to Google Drive.
templates/	Contains all HTML pages used for the web interface (frontend).
static/	Stores CSS, JavaScript, images, audio, and logo files.
data/	Contains structured Excel data, such as the course offering file.
scripts/	Utility scripts
__pycache__/	System cache folder. Automatically generated. Can be deleted to reset cache.

3.3 Setting up Virtual Environment:

We recommend using Python virtual environment for running our website, for clean and stable performance. This keeps all project-related libraries isolated from your system-wide Python installation.

NOTE: This setup only needs to be done once.

Step 1: Open Command Prompt: Navigating to directory

1) Press Windows + R, type cmd, and press Enter or type Command prompt in search bar.
2) Navigate to your project directory:
   Type in your command prompt:

```
C:\Users\asus>cd C:\Users\asus\Downloads\StuWin
```

   Note: replace `asus` with your username

Step 2: Creating Virtual Environment (only once):

Now type this in the next line:

```
C:\Users\asus\Downloads\StuWin>py -m venv venv
```

Press enter/return key. This step takes some time, don't worry!

Step 3: Activating Virtual Environment:

Once it's created (you'll see your directory name) type:

```
C:\Users\asus\Downloads\StuWin>venv\Scripts\activate
```

Now you'll see something like this:

```
(venv) C:\Users\asus\Downloads\StuWin>
```

Congratulations! You're going well till now!

Step 4: Installing Libraries/packages:

Now we install important packages for all features to work!
Ensure your virtual environment is active (Step 3)

Now type the following single command to install all the required packages:

```
pip install flask flask_sqlalchemy werkzeug google-auth google-auth-oauthlib google-api-python-client requests spotipy pandas markdown
```

3.4 Setting Up Local Database (MySQL)

Since StuWin runs locally on your sever, currently it doesn't host any web server, all data is stored locally on your system.

StuWin uses MySQL for database operation.

This section will guide you on how to install and setup MySQL if you don't have it installed already on your local computer.

3.4.1 Installing MySQL:

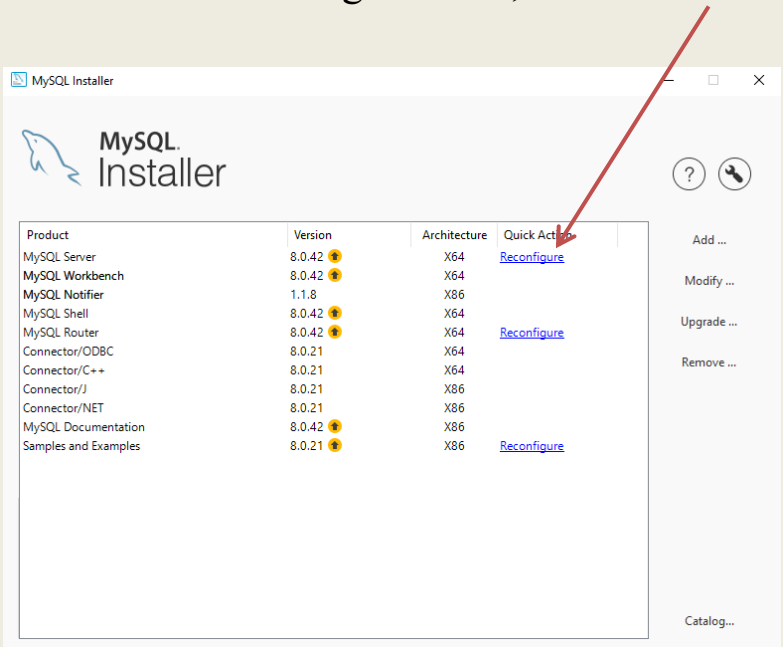
To download MySQL (free), please click on this link. We have automatically suggested the required version, so when you click on this link, the download will start automatically!

Just follow the on-screen instructions and complete your installation.

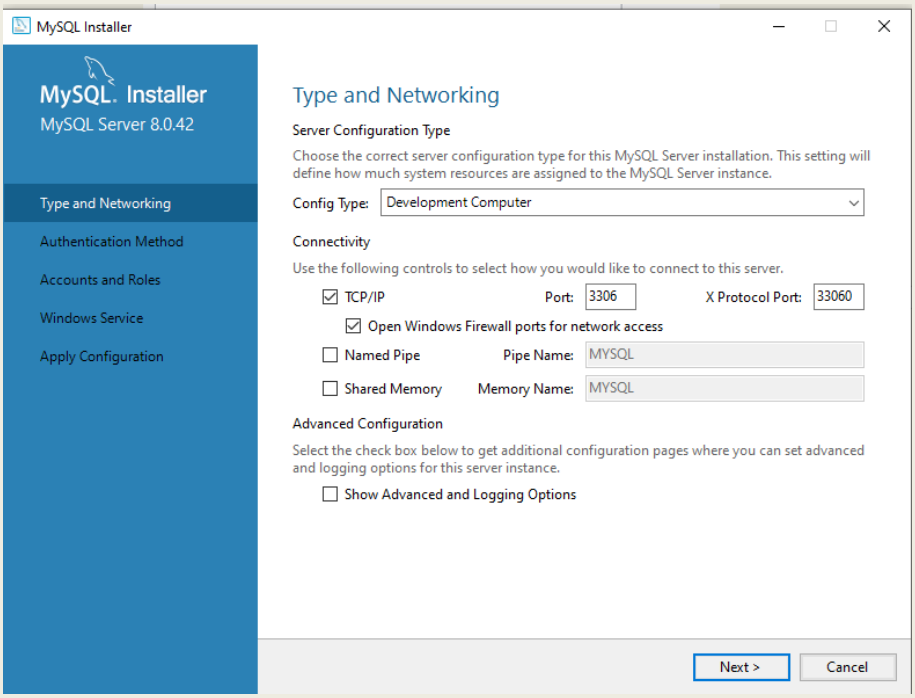
3.4.2 Configuring your MySQL server:

Once you install MySQL, you'll need to change some settings and add a **password**. This section will tell you how to do it.

1. Go to Windows search bar and type MySQL Installer-Community, and open that app.
2. You'll see something like this, click here on reconfigure

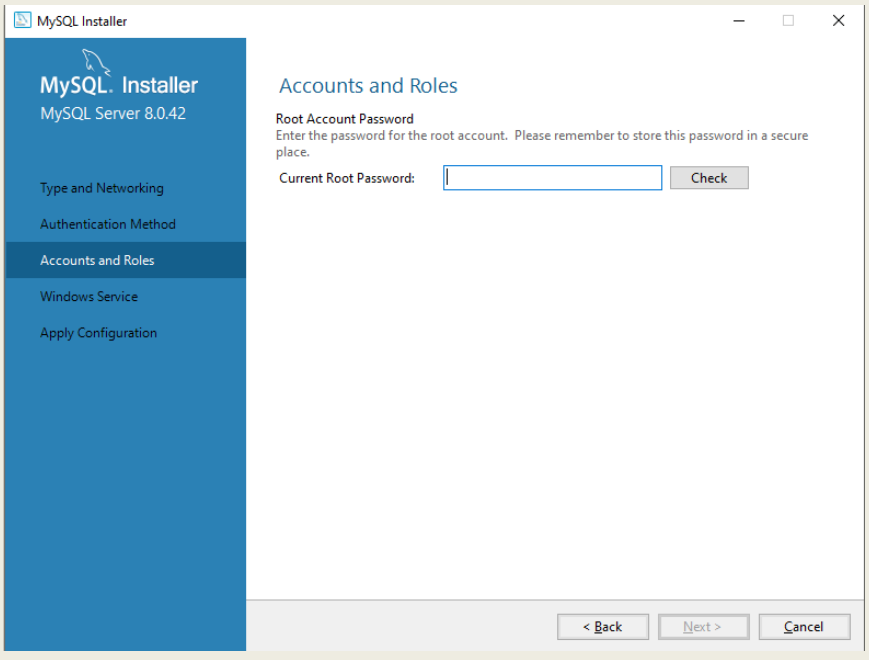


3. Make sure for Type and Network, these are the settings:



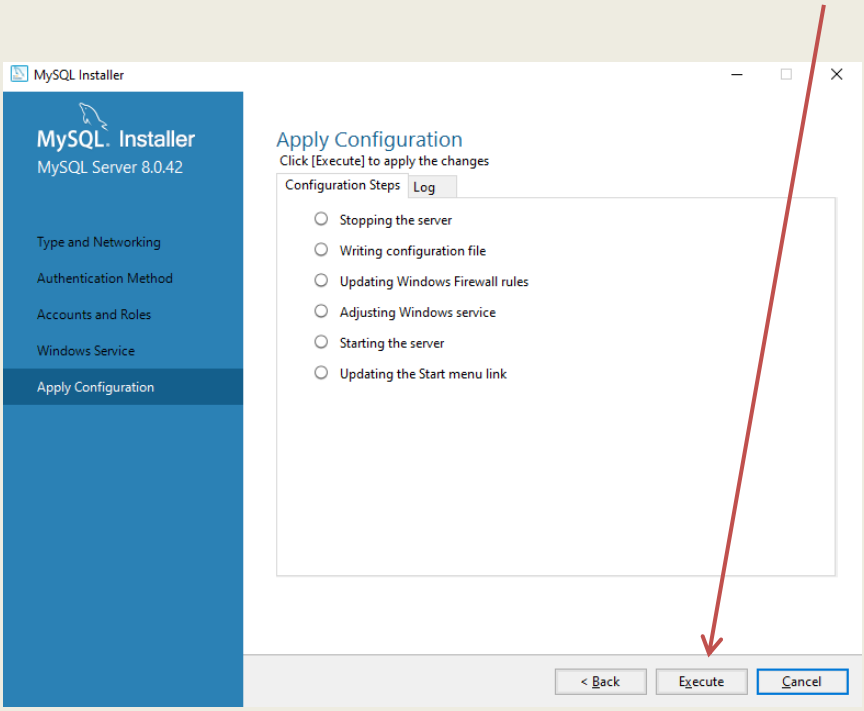
4. Click next and click next again till you reach “Accounts and Roles”

   Here, you’ll be asked to enter your password, PLEASE MAKE SURE YOU REMEMBER YOUR PASSWORD.



NOTE: Please remember your password!

5. Click on Next and click on Next again, till you reach "Apply Configuration" settings and click on Execute.



That's it! Close the app.

3.4.3 Configure db.py:

Now that you have successfully installed MySQL, we'll configure your database.

To do this, go to `db.py` from your root folder. Open it with Notepad/Visual Studio Code (recommended)

Change your password which will be on line 11.

```
# Change your settings here!
DB_CONFIG = {
    "host":     "localhost",
    "user":     "root",
    "password": "Simran",        # <----- Change your password here please!
    "database": "StuWinTest"     # DO NOT CHANGE THIS
}
```

NOTE: Make sure password is in double quotations: “{password}”

Put the same password as you put during installation.

NOTE: Password is case sensitive!

DO NOT CHANGE ANYTHING ELSE!

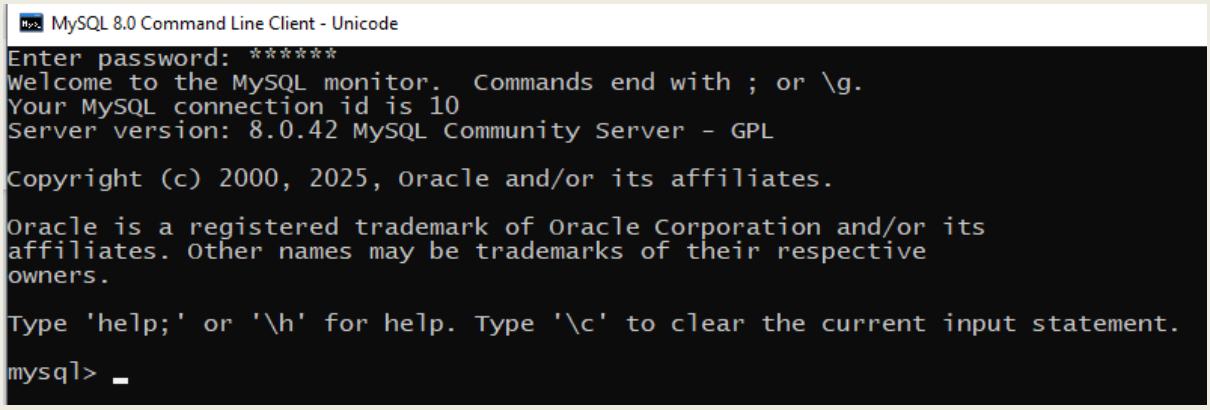
3.4.3 Creating Database and Tables:

3.4.3.1 Creating Database:

Go to search bar and type “MySQL 8.0 Command Line Client-Unicode.

Enter your password (it must be the same as you entered during configuration, in your db.py)

You’ll see something like this:



Now, simply copy/type this command and press enter.

```
CREATE DATABASE StuWinTest;
```

Now close the app and open again.

Again, type your password, and type this command.

```
Use StuWinTest;
```

You’ll see “Database Changed” and a new line.

3.4.3.2 Creating Tables:

Now we'll create tables, copy the following commands (highlighted in grey and that's it!

1. calendarevents (Table used for storing events)

```
  CREATE TABLE calendarevents (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber VARCHAR(20),
  title VARCHAR(255),
  location VARCHAR(255),
  description TEXT,
  startDateTime DATETIME,
  googleEventId VARCHAR(255),
  emailSent TINYINT(1) DEFAULT 0
);
```

2. coursegpasummary (Table used for storing overall course gpa)

```
CREATE TABLE coursegpasummary (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber VARCHAR(20),
  courseName VARCHAR(100),
  currentPercent DECIMAL(5,2),
  targetPercent DECIMAL(5,2),
```

```
  updatedAt TIMESTAMP DEFAULT CURRENT_TIMESTAMP
ON UPDATE CURRENT_TIMESTAMP

);
```

3. courseoffering (Table that contains available courses for Columbia College (skip this, if you're not Columbia College student)

```
CREATE TABLE courseoffering (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  department VARCHAR(20),
  courseName VARCHAR(150),
  courseNumber VARCHAR(20),
  credits DECIMAL(4,1),
  prerequisite TEXT,
  corequisite TEXT,
  description TEXT
);
```

4. courseweightage (Table storing all courses weightage)

```
CREATE TABLE courseweightage (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber VARCHAR(20),
  courseName VARCHAR(20),
  assessmentType VARCHAR(50),
  quantity INT,
  totalWeight DECIMAL(5,2),
```

```
  createdAt TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

5. deadlinesreminder (Table that stores the reminder for tasks)

```
CREATE TABLE deadlinesreminder (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber VARCHAR(20) NOT NULL,
  name VARCHAR(100) NOT NULL,
  taskName VARCHAR(200) NOT NULL,
  reminderDate DATETIME NOT NULL,
  createdAt TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

6. deadlinestable (Table that helps above table)

```
CREATE TABLE deadlinestable (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber VARCHAR(50),
  name VARCHAR(100),
  email VARCHAR(255),
  dueDate DATE,
  courseProgressDate DATETIME,
  paused TINYINT(1) DEFAULT 0,
  timeStamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

7. goals (Table that stores your goals)

```
CREATE TABLE goals (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber INT NOT NULL,
  goalText TEXT,
  completed TINYINT(1) DEFAULT 0,
  createdAt DATETIME NOT NULL DEFAULT
CURRENT_TIMESTAMP,
  updatedAt DATETIME NOT NULL DEFAULT
CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
);
```

8. gpacalc_courses (Table that stores your courses for GPA Calculation)

```
CREATE TABLE gpacalc_courses (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber INT NOT NULL,
  courseCode VARCHAR(20) NOT NULL,
  credits DECIMAL(4,2) NOT NULL,
  gradeValue DECIMAL(4,2) NOT NULL,
  isScenario TINYINT(1) DEFAULT 0,
  timeStamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

9. gpacalc_meta (Table that stores your program, grade mode, GPAs)

```
CREATE TABLE gpacalc_meta (
  studentNumber INT NOT NULL PRIMARY KEY,
  program VARCHAR(100) NOT NULL,
  totalCredits DECIMAL(5,2) NOT NULL,
  gradeMode ENUM('gpa', 'percent') NOT NULL DEFAULT 'gpa',
  currentGpa DECIMAL(4,2),
  scenarioGpa DECIMAL(4,2),
  timeStamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
);
```

10. journalentries (Table that stores your Journal)

```
CREATE TABLE journalentries (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber INT NOT NULL,
  entryDate DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,
  content TEXT
);
```

11. reflectionprefs (Table that stores your Self-Reflection settings)

```
CREATE TABLE reflectionprefs (
  studentNumber INT NOT NULL PRIMARY KEY,
```

```
  frequency ENUM('Daily','Weekly','Monthly')
NOT NULL,
  dayOfWeek INT,
  nextRun DATETIME,
  paused TINYINT(1) DEFAULT 0
);
```

12. teststudents (Table that stores your login information)

```
CREATE TABLE teststudents (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  name VARCHAR(100),
  email VARCHAR(100),
  studentNumber INT,
  password VARCHAR(255)
);
```

13. todos (Table that stores your To-Do)

```
CREATE TABLE todos (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber INT NOT NULL,
  todoText TEXT,
  completed TINYINT(1) DEFAULT 0,
  createdAt DATETIME NOT NULL DEFAULT
CURRENT_TIMESTAMP,
```

```
  updatedAt DATETIME NOT NULL DEFAULT
CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
);
```

14. usercourses (Table that stores the courses that you're taking per semester)

```
CREATE TABLE usercourses (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber VARCHAR(20) NOT NULL,
  department VARCHAR(20) NOT NULL,
  courseNumber VARCHAR(20) NOT NULL
);
```

15. userpersonalgraph (Table that stores your personal graph data)

```
CREATE TABLE userpersonalgraph (
  id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
  studentNumber VARCHAR(20),
  courseName VARCHAR(100),
  assessmentLabel VARCHAR(50),
  actualScore DECIMAL(5,2),
  requiredScore DECIMAL(5,2),
  createdAt TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

NOTE: All data is stored in (by default):

C:\ProgramData\MySQL\MySQL Server 8.0\Data\stuwintest

3.5 Troubleshooting:

Here's some common things that could go wrong:

1. Virtual Environment doesn't get created or run

   Solution: Save your StuWin folder in another location (recommended local disk D, or E).

2. Python Not Recognized

   Sometimes, `py` will not work. Don't worry, this happens due to different python versions!

   Solution: Use `python` instead of `py`

3. `credentials.json` not found

   This happens when this file is not in your directory.

   Solution: Reinstall the folder or check your directory if you deleted the file or changed it's position. Make sure it's in the same folder /StuWin

4. App Doesn't Open in Browser
   This happens when you run the code (section 4) but you don't see website or nothing happens.

   Solution: You must manually type the address in your browser. It looks something like this:
   Make sure JavaScript is on

   `http://127.0.0.1:5000`

3.6 Updating website:

The website currently has limited features and might have some bugs. However, StuWin is still an active project and will continue to receive more improvements.

Therefore, to ensure you get the best experience, it's important to know that how to update your local version without losing any progress, settings and account.

This section will explain how to safely update your StuWin system, while ensuring all data stays intact.

Here's how to do it:

3.6.1 Downloading and extracting the update:

Download the latest version as .zip file. This file ONLY contains the changed files and README.md. And then extract it.

3.6.2 Creating Backup:

Before replacing anything, it's important that you make a backup. To do this simply copy your original folder and paste it and rename is as `StuWin_Backup`.

3.6.3 Replacing files:

Once you extract the folder, you'll see the update files following the same directory as the original folder. Copy all the files, that simply paste it in your root folder. Click 'replace all' when asked by windows.

NOTE: Make sure to follow the directory/location of files. For example, replace all .html files in `/templates` folder, all .py files will directly go to root folder, etc.
DO NOT DELETE `/venv` and `credentials.json` and `uploads` folder unless told in update folder.

4. Running the website

Once all installation steps are complete, this section explains how to **start the local server** and **open StuWin** on your browser.

This should be done EVERY TIME you want to run StuWin on your computer.

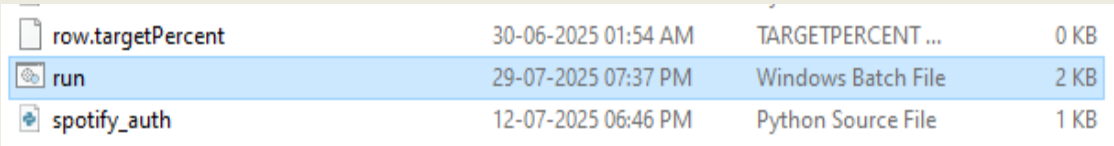
4.1 Running through Script:

You'll notice a .bat file (windows batch file) (run.bat) in your StuWin folder.

This is an automatic script created by us that'll automatically do everything and directly launch the website on your default browser.

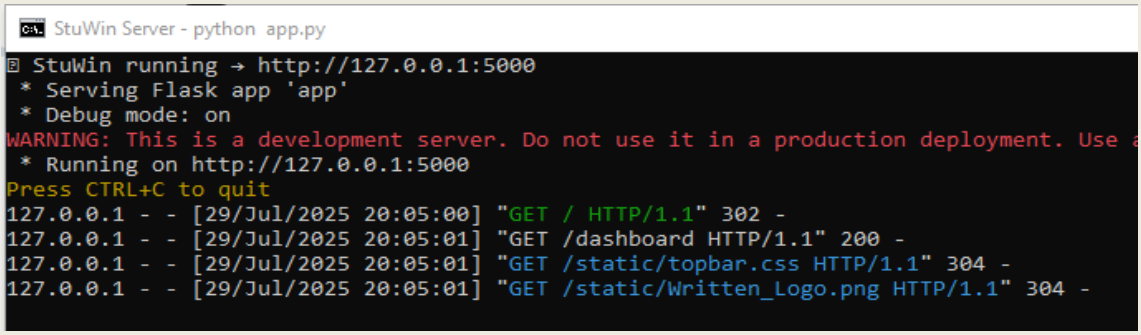
Here's how to run the StuWin with this script:

1. Click on run.bat file:



2. It'll open command prompt and automatically execute all instructions and you'll be able to see the website opened in your browser window.

NOTE: To Close it: See this and press Ctrl+C and close both command prompt windows.



4.2 Manually Running:

If automatic script doesn't work (which can happen due to multiple reasons), you can still run is manually!

Here's how to do:

Step 1: Follow the step 1 (Directory Navigation) from previous section (3.3) after opening command prompt.

Step 2: Follow the step 3 (Activating Environment) from previous section (3.3)

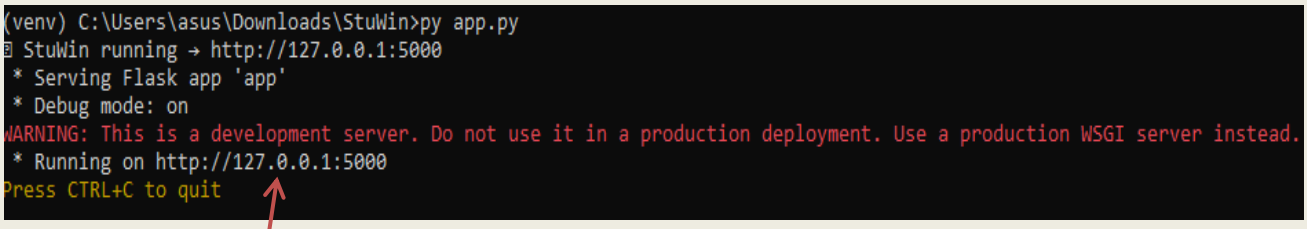
Step 3: Running main app:

Now type the following:

```
py app.py
```

And press enter.

After some time, you'll be able to see this:



Congratulations! You are officially running our website!

Step 4: Opening on browser:

Copy this link and paste in your browser!

Sample: http://127.0.0.1:5000

NOTE: The link can be DIFFERENT for you!

And that's it! You are now running StuWin!

5. Login and Registration

StuWin offers a secure login system that allows each student to create an individual account. Once logged in, all features such as GPA tracking, reminders, and journaling will be personalized to the specific user.

This section explains how to create an account, log in, and reset your password.

5.1 Creating an account:

Enter your details, including Name, Gmail, Student ID, and a secure password. And then register!

Tada! You can now use our services! And you'll be redirected to dashboard.

NOTE: You might also want to sign-in with your Google Account for using features like Notes, Calendar, etc.
We recommend creating a new Google Account for studies. This helps to keep your personal events and tasks separate from the academic tasks.

StuWin website uses cookies. So, once you sign-in, you don't need to sign in again unless you logout.

So, we recommend signing out when using public computers to ensure privacy.

5.2 Privacy Concern:

Since currently our website runs only as local host, the database is stored in YOUR computer locally. Our team, Google, or any other API cannot access your any data. However, for using features such as Notes, Calendar, and Task Management, we do require permission for

your Google Drive and Google Calendar access.

However, this data is strictly protected by API and is not at all related with our database. Furthermore, this data is protected by Google's encryption.

But we do understand that some users can be sceptical about sharing your Google account data, that's why we have these 2 options:

6. Do not login with Google, but you'll lose access to features like Notes, and Calendar. However, other features will not be affected.

7. Create a separate new Google account only for academics, to keep your data save and organize your study data from personal data.

5.3 Logging In:

This page will be the page you see first time when you run our website on a new device.

Simply enter your Student ID, and password to continue!

NOTE: Password is case sensitive, so make sure to check your CAPS-LOCK and enter password carefully!

5.4 Forgot Student ID/Password

Please note that each student ID is unique and cannot be regenerated for current user. So make sure to **remember your student ID always.** In case, you forget your password, click on "Forgot Password" button, then you can type your email to get link to reset your password (email must be the same as registered).

6. Features

Now that you're done with installing and registering for your website, we'll talk about what *actually* we can do! In this section, we will talk about the features StuWin has to offer!

6.1 GPA Tracking and Maintaining:

This is our website's flagship feature and one of the major features! Our in-house developed algorithms help you to track your GPA and even suggest the required grades in next assessment so that you can reach your target and stay motivated! Let's see how to use this feature! To use this feature, click "GPA Tracking" from the sidebar.

6.1.1 Adding Courses

1. The very first thing you should do this to register your courses!

   To do this, simply write your course as Department name and Course Number (e.g. CSCI 101, MATH 100, ENGL 100, etc).

   Next, you enter your goal/target percentage that you desire for this course! This sets your personal goal for the course. The system uses this value to evaluate your performance and provide suggestions.

2. The next thing you do is add weightage. You can see the course weightage in your course outline.
   For each type of evaluation:
   Assessment: e.g., Quiz, Midterm, Lab, Final
   Quantity: How many of each (e.g., 10 quizzes)
   Total Weight: Overall weight (e.g., 10%)

   NOTE: Total Weightage must add up to exactly 100% or you'll get an error!

TIP: If you don't know the quantity, for example class participation, or attendance, just type it as 1. You can later edit it later and it dynamically changes your progress as well!

TIP: When adding weightage of more than 1 quantity, you add total weightage, instead of per 1 evaluation.
For example, if you have 2 midterms worth 30% (you'll type 30, instead of 15 for each). Our system automatically finds the weightage of each evaluation! Just enter the course outline weightage and we'll take care of the rest!

Example:

Type	Quantity	Weight (%)
Quiz	10	10
Midterm	2	30
Lab Reports	5	30
Participation	1	5
Final Exam	1	25

6.1.2 Entering Your Scores:

Once your structure is saved, you'll be taken to the **Enter Scores** page.

Here, you will see fields for each assessment (e.g., Quiz 1, Quiz 2, etc.) and the required score. If you'll scroll down, you'll see the graph of your progress (only fills when you enter your scores) and the current overall and your target!

Now simply enter the grades you got only for graded assessments and click “Update and Calculate” button and you’ll see the magic!

The system will now:

- Calculate your current weighted GPA
- Display your total progress vs. goal
- Suggest scores needed for remaining assessments

6.1.3 Updating/Dropping Grades:

Once you write your grades, you do have option to change it for later.

To change the grades, simply delete older grades and type new one and click “Update and Calculate” button again.

You might want to change your grades if:

- You just want to look at multiple cases to look how much percentage would you need for next assessment.
- You want to check your overall, but official grades aren’t out yet, but you want an idea or estimate.
- Your instructor changed your grades due to variety of reasons.
- Your weightage changed (you dropped some assessment (see below for more information) and grades were adjusted.

TIP: Sometimes your instructor drops your assessments with lowest grades! For example, if you have 5 quizzes, worth 1% each, but your instructor drops 1 quiz, so now you’ll have total 4 quizzes, worth 1.25% each!

But what about if your instructor adjusts the weightage of your quiz to your final exam? Worry not! We cover that as well!

NOTE: When you drop any assessment, you get a prompt for where you would like to shift your drop percentage to (i.e., which assessment type) or would you like to cancel it.

6.1.4 Analysing Performance:

Now that you know how to use this feature, you can see how this helps you to ace your academics and set your mental target!

To help you visualize your progress, you'll get a Course Graph when entering your scores. This graph shows your current score and the required score to achieve your target!
Just below this graph, you'll be able to see your Current Overall* and Required Percentage and how much behind you're or by what percentage you're ahead of your target!

***NOTE:** You might notice that your overall might be *slightly* off from your Moodle or whatever platform/portal your Institute uses for grades. But don't worry, this is completely normal.
For example, when an assessment is not grades, Moodle treats "empty assignments" as **0**, while StuWin simply excludes/ignores (industry-standard) them for accurate and precise calculations. Once, all your grades are graded in Moodle, the overall will be same!

Not only you can see your personal course track, but you'll also get a personalized email every week to remind your academic progress, which will tell you that in which courses are you lacking in, and which courses you're progressing in.

TIP: You can also tell an overview of your progress in GPA Tracking main page (The same page where you add new course). This page

shows you your current overall and tells if you're behind or ahead of your target!

6.1.5 Deleting Courses:

Now once you've completed your whole course and semester is over, you can delete your course (and add a new course)!

NOTE: Deleting your course will be **permanently** delete from the database, and this process is not reversible. So, we recommend deleting your courses only when you've completed your courses!

Now, to delete your course:

1. Go to GPA Tracking section from dashboard.
2. Simply click on delete button under "Action" column

That's it! You can add more courses!

6.2 Journal:

StuWin also allows you to write your personal "Journal". This section helps you write whatever you want and save it permanently in the database!

This section also helps you with tracking your personal goals, To-Do tasks and promotes mental wellness by allowing personal expression and self-tracking.

This feature is accessible by going to Journal section from dashboard.

6.2.1 Writing Entries:

You can write anything you want in your journal! This is your personal diary! There's no limit to whatever you want to write and what you want to write!

Here's how to do it:

1. When you go to Journal section, at the very top, you'll be able to see "Journal" section. You can simply write anything you want and then click "Save Journal" button to save it, so that you will be able to see this even when you come next time!

   NOTE: You can edit, delete, write a completely new Journal anytime you want, by doing the same process as above!

2. Similarly, you can write your goals and to-do tasks that you want to do.

   To distinguish the difference between them, think goals as your long-term plan (for example: getting good grades in this semester), and to-do as a short-term task (for example: doing webwork)

   To do this, simply click on the "plus" icon and write whatever your goal/task is in the corresponding field.

3. Once you add your goals, you'll be able to see a list of all your goals and tasks. You'll notice it has a checkbox. Once you achieved your goal/task, you can click on that checkbox.
   The selected goal will get a ~~strikethrough~~ line, indicating that you achieved that task.

   NOTE: Even if you completed the task and clicked on checkbox, it won't be automatically deleted. This is a feature so that you can keep track and see your progress. But you can simply click the delete button to permanently delete them!

   NOTE: When you delete task/goal, it'll be permanently deleted and cannot be recovered, therefore please think carefully before deleting anything.

6.2.2 Self Reflection:

StuWin has a self-reflection feature where you can self-track your goals and ideas and check mentally if you're doing okay or not.

Self-reflection is a series of questions which user answers for themselves and mentally tracks them. The responses you give to these questions are NOT stored in our system; it's just for your personal growth. We believe staying honest with yourself is the first step for being successful, therefore, answer these questions honestly!

By default, you'll receive self-reflect reminder every Week on Sunday through your email. Once you get the email, simply login to StuWin, come back and start answering questions!

But you can always change this. Here's how this works:

1. Scrolling through Journal section, you'll see a sub-heading called "Self-reflection". Here, you have 2 options:
   a. Saving your automatic email reminder settings: As you knew from above, by default it's every week on Sunday. But if that timing doesn't suite you, you can simply change according to your preference and choose if you'd like monthly, weekly or even daily reminders and can also choose the weekday. Simply click "Save" and that's it! You will now see your Next Scheduled Self Reflection Reminder time and date!

   b. "Self-reflect now": You can use this button if you'd like to self-reflect immediately.

      NOTE: Using "self-reflect now" will change your next upcoming date according to the preference you saved earlier (part a)!

NOTE: We understand that sometimes you don't want to give answers to these questions or are not feeling good, therefore, StuWin has option of "Skip for now" which you can use to simply skip your self-reflection. It will automatically be scheduled according to your preference.

6.3 Notes:

This feature allows students to store and organize lecture notes, worksheets, PDFs, and other learning materials for each course—especially useful for retaining content beyond a single semester.

You can sync and access all your PDFs, lecture slides, worksheets, everything from this section.

NOTE: You need to login with Google to use this feature as this feature uses Google Drive.

NOTE: Any of your data is NOT stored on our sever or database, this data is only synced with your google drive and any StuWin admin cannot see this.

To use this feature, first ensure you're logged in with Google, and then go to "Notes" section from dashboard.

You'll be able to see all your Google Drive files here, and you can view them online (through browser without downloading), Download them on your local machine, or delete them permanently from your Google Drive. And you can upload your notes and files.

TIP: We recommend having a completely new Google Account for StuWin to keep your Notes separate from your personal Google Drive data.

NOTE: You can only store 15GB worth data as that's the free limit for Google drive, unless you buy Google Plus Subscription.

6.3.1 Uploading Notes:

Renaming Files:

To upload your notes, we recommend a good naming scheme.

Naming your files properly will help you organize them and easily find them when needed.

You can freely choose your own naming scheme, but here's our recommendation:

```
[Course Name & Number] [Week # (optional)] [Topic]
```

For example, Math 213 Week 5 Partial Derivatives

To rename a file, simply right-click on the file and select rename, or single click on the file and press "F2" key from your keyboard.

TIP: Keep your naming pattern consistent.

Uploading Files:

To upload your file, simply click on "Choose File" option and navigate to the directory where you saved your file/notes. And then click "Upload File" button, wait a few seconds and that's it!

NOTE: You may need to refresh the page to see the selected file on the list.

6.3.2 Accessing Notes:

Once you need to study for notes or look for any other file, simply search the name of the file or look through the list. And then under "Actions" column, you can either download the file or delete it. To access it online, simply click on the file name and it'll open it in other tab.

NOTE: Some files may not be able to view online, due to decoding limitations of Google Drive.

Supported formats include (but are not limited to):

- .pdf, .docx, .txt
- .jpg, .png, .pptx
- Google-native files like Google Docs, Sheets, and Slides

6.4 Task Manager and Calendar:

This happens a lot with students that we often forget our deadlines or even homework due dates or quiz dates or even when to study!

Worry not! With StuWin, you can keep track of everything all at one place!

For this, we have 2 features: Task Manager and Calendar.

Feature	Task Manager	Calendar Events
Purpose	Short-term deadlines	Long-term or recurring academic events
Login Type	Only StuWin login needed	Need to sign with Google as well.
Sync Type	Syncs only with StuWin calendar	Syncs with both: StuWin and Google Calendar
Suitable For	Webwork, Quizzes, Assignments	Finals, Appointments, Study Blocks
Represented By	🟠 Task	🔵 Event

Now we'll talk about how to use these features and what they do.

6.4.1 Using Task Manager:

To use this feature, click “Task Manager” section from dashboard.

Under add task section, simply write the name of task (for example, ‘Math 213’ Midterm and the date and time of when you’d like automatic email reminder.

After this, click on Save Task button and that’s it! You’ve saved your task!

You’ll be able to see the task in a table below, where you can also delete it. And will get a confirmation email about your task.

6.4.2 Using Events:

To use this feature, navigate to “Calendar” section from sidebar/dashboard.

Under Add Event section, type Event Name under Title, Date & Time of event, Location of event, and Description (optional) and then click “Add Event”.

Once you do this, you’ll be able to see Events in Calendar and under “Upcoming” list, where you can also delete them. These will be synced with your Google Calendar as well.

6.4.3 Using Calendar:

Under the same page as in section 6.3.2 (Calendar), you’ll be able to see your StuWin Calendar. Here, you can visually see your upcoming events and tasks and can click on any of them to see in detail or delete them.

You can also change the mode from Monthly, Weekly or Daily Calendar mode for more about your tasks/events.

NOTE: This calendar syncs both your tasks and events (but events are ALSO synced with your Google Calendar).

6.5 Course Planning:

NOTE: THIS FEATURE IS CURRENTLY ONLY AVAILABLE FOR COLUMBIA COLLEGE. If you're not a student from this college, please move to next section.

NOTE: Currently, Course Planning works only for associate degree audits. Others might be added in future.

Other major colleges will be added in future! Stay Tuned!

Course planning can be overwhelming—especially when students aren't sure which courses to take, which prerequisites are needed, or how many credits they've already earned and how many are left.

The StuWin Course Planning feature solves this by using your academic history and major to:

- Track completed courses
- Recommend future courses
- Check prerequisites and time conflicts
- Generate a personalized plan using the combination of customized AI and advisors' expertise.

To use this feature, click on "Course Planning" from dashboard.

6.5.1 Using Course Planning

Here, you can select your faculty, and your major and the current semester you are in, and the corresponding degree audit will show up.

After this, select the courses that you have completed and any special request that you have, such as no math course, you want SOCI for arts this semester, etc.

And then click "Get Recommendations" and wait a few seconds till we generate the required courses that you want! And then that's it!

You'll see suggested courses that you can take in a table form, containing course name, credits and reason to choose it!

If you'll scroll a bit, you can also see your progress bar which would show your credits completed and left.

TIP: You can add these courses into the editable degree audit and can download it for personal use.

6.5.2 Important Things to Remember:

Since course planning is a major decision for any student, we want to make sure you do it right. Therefore, we have these tips for you:

1. **Always consider with your dedicated advisor to finalize your course selection. The courses offered by StuWin are for references only.**
2. You'll see "courses completed" section will stay the same as you entered your courses even for next time. Please DO NOT DELETE them as our algorithms gets to know from here that which courses you have completed and suggests other courses according to this data. These courses will be saved into your profile and counted toward your degree audit.
   NOTE: You can write all the courses that you have completed here (if you started using this feature later)
3. The recommendation table is not saved or does **not** have an export option yet (might be added later), therefore please take a screenshot or picture of this table for reference.
4. Also, if you refresh the page, you'll get a new recommendation table, so don't try to refresh it.
5. If you're not satisfied with your suggested list, you can write respective command under "Anything in mind?" section and try to generate a new one.
6. This doesn't account the timing and days of classes.

Good Luck choosing your courses!

6.6 Study Session:

Many students struggle with maintaining focus during study time, balancing breaks, and tracking how much time they've studied.

The StuWin Study Session Tool solves this by using a structured timer with real-time progress tracking, reminders, and built-in reflection prompts.

The features include notification, timer, break time, progress bars, Spotify integration, dynamic natural sounds, and much more!

To use this feature, navigate to Study Session from dashboard.

Now, we'll see how this feature can be used.

6.6.1 Starting Session:

Once you open this page, you'll see the form which asks you to fill Subject that you're studying, number of hours you want to study (Total Time), number of minutes for break duration, after how many minutes do you want a break (break frequency) and a table containing name of the topics that you want to study, and how much time you want to dedicate for THAT topic.

NOTE: Your total time must add up with the sum of time you want to use for each topic.
For example, if you enter total time to be 2 hours, and you have 2 topics to study, their individual time must add up to 120 minutes (2 hours)

Once you complete this page, you can click "Start Session"

Now, you'll be redirected to the main page. And your timer will automatically start.

Here, the purple timer is the timer for your current topic, and session timer is your total time.

You have option to pause; in case you want to go to restroom or have water or any other minor thing to do.

In the top left, you can choose your desired background that you want, and ambient sound that you want, whereas on the right side you can login with Spotify* and choose your desired playlist to play in background.

***NOTE:** You must login again with your StuWin account when you login with Spotify to verify that it's YOU!

6.6.2 Break System:

Once you hit the amount of time you entered for break frequency, you'll hear a notification sound. And get a pop up about your break timer, click okay, and now your subject and session timer will pause, and break timer (break duration) will start.

Once break is started, you will hear notification sound again and you'll get a prompt for entering the progress of the topic (in %) i.e. how much topic you have covered, then, and your main timers will resume after the break is over.

TIP: Since we use notification sound to make you remind about breaks, it's suggested to keep your volume high or wear headphones.

6.6.3 Progress System:

Before your brake gets started, you'll be asked how to enter your progress of topics that you have completed.

NOTE: This only asks the amount that you have completed from start!

For example, if you entered 15% first time and 10% next time, it'll be treated as 10% in total, this is wrong.

You must enter 25% for next time for this to work.

Once you reach 100%, you'll get a prompt whether which topic would you like to study next, just choose from drop down menu and the process is repeated.

You'll be able to see your visual progress down as a table, along with status.

NOTE: DO NOT REFRESH THE TIMER PAGE, or your timer restarts from starting.

NOTE: You might notice that the UI for this page is simple, this is done intentionally. The idea is to minimize your distraction from the screen, especially keeping in mind many students study at night :)

NOTE: Once you complete all your topics 100%, your session will be over! And you'll get prompt if you'd like to end session or continue revision till your total timer! Either way, you'll get a session report card of how much time you spent on each topic.

NOTE: If you couldn't complete your topic by your assigned timer, you'll get "overtime timer" which will be added to your session report.

6.7 GPA Calculation:

Sometimes student has that 'what-if' scenarios for grades calculation. Don't worry, we got this.

With StuWin, you can now calculate your scenario for GPA for other courses to know what will be your overall if you get a scenario GPA for many courses!

NOTE: StuWin follows University of British Columbia's Grading Convention. Also used by other colleges and universities as well, such as Columbia College, etc.

Please check your institute's grading system!

To use GPA scenario calculator, go to “GPA Calculator” from dashboard.

In this section, we’ll talk about how to use this feature.

6.7.1 Entering graded courses:

The very first you use this feature, make sure to enter all your graded courses from earlier (if any). To check your graded courses, go to your respective institute’s portal.

There are 2 modes to enter your grades:

a. Percentage: You enter your grades as percentage, and it’ll convert to GPA automatically
b. GPA: You directly enter your grades in GPA

NOTE: Our website will only show you overall current/scenario GPA, regardless of which mode you chose above.

Here’s how to write courses:

1) Tell your program name, total credits for program, and the mode you’re using.
2) Now simply type you course name (since this is for many universities, it’s impossible to show all courses name, therefore, you can simply type the course name.

   NOTE: Please follow this format for naming:

   `{Course Department} {Course Number}`

   For example, CSCI 275, GEOG 255, ENGL 100, etc…

3) Now enter the credits of course, and your grades/percentage, and make sure Scenario box is unchecked and click “Add”.
4) Similarly add all courses that are graded.

   NOTE: If you enter wrong information, you can delete course.

6.7.2 Calculating GPA for Scenarios:

Now, once you're done entering your real grades, it's time for magic! Let our industry-leading algorithm help you calculate your scenario-based GPA.

Here's how to do it!

1) Similarly, as above, type the course name, credits and make sure to **select/tick the "Scenario?"** box.

   NOTE: IF you don't tick "Scenario?" box, your **current GPA is affected.**

   Then, enter your expected/desired GPA that you want.
2) That's it! Scroll down and you can see your new Scenario GPA!

   TIP: You can change the desired/expected GPA again after adding the course and click "Update All" to create a new scenario.

   NOTE: Every time you had change grading, please make sure to select "Update all" button to confirm and save changes.

Now, with that being the last feature, we have covered all our features. However, there's much more on the way, including supporting more colleges course planning, more features, better UI, optimization, more flexible and better third-party integration and larger scalability for more devices

7. Limitations and Important Notices

While StuWin offers a wide range of features, it is important to acknowledge its current limitations and configuration constraints. As of current version V 16.5 (July 2025), the platform is still in development and should be used for academic purposes only.

Below are some general limitations to keep in mind when using StuWin system on your local machine:

7.1 General Limitations:

Areas	Details
Security Certificate	StuWin is currently hosted on `localhost/` so it does not support `HTTPS`
Database Access	MySQL connection is local host only, cannot run online or server based as of now
User Scope	Designed for max 100 students per local machine.
Storage	Uses about 500MB storage including the database data.
Optimization	A bit slow in terms of responses as it uses Python.

NOTE: Some of these issues may solve in future through updates. This section will be updated as well. Stay Tuned!

Now, there are few major things to keep in mind as well. Here are some of those important notices:

7.2 Important Notices:

As we are a college project, and very low on budget, we only used the free sources available for us, and therefore we have some constraints on some things. Here are some things to keep in mind while using StuWin as local host!

7.2.1 Mailgun (Email Reminder):

StuWin uses a free Mailgun sandbox domain to send automated emails for:

- Task reminders
- Weekly progress reports
- Self-reflection prompts

Important Notes:

- Mailgun sandbox accounts can only send to **authorized or test emails**
- Emails will most likely appear in your **Spam or Promotions** folder
- You **must verify the email address** before you can receive reminders

Recommendation: For long-term use, create your own Mailgun domain and update the API key in `app.py`.

7.2.2 Google API credentials:

StuWin uses Google APIs for:

- Drive file upload/download
- Calendar event syncing
- OAuth login (Google sign-in)

Important Notes:

- The provided `credentials.json` is in **testing mode**
- Testing apps have a **limited number of OAuth users allowed**
- If you get an error like **"This app is not verified"**, it's due to limited access granted by Google

Recommendation: Register your own app in Google Cloud Console and replace `credentials.json` and update the key in `app.py`.

7.2.3 Gemini API:

- Currently using **Gemini 2.5 Flash**
- The API key has token input limit and will be stopped if overused (exceed limit)
- Output may occasionally return **empty responses**, especially if input is vague or repeated.

Recommendation: Add specific and well-worded prompts to improve Gemini responses, get your own API key for increasing input from Google AI studio, and replace the key with your own.

7.2.4 Frontend and Device Compatibility:

- Designed and tested for use in Google Chrome, and Opera (Desktop only, JavaScript: On)
- Not tested for mobile responsiveness or Safari/Firefox
- UI elements (like modals, charts, study timers) may behave unexpectedly on tablets or phones

NOTE: We suggest turning off any adblocker , such as Ublock Origin is turned off for this site. This is production website, and the adblocker might block some permissions from third party apps.

Also, if you're on your phone or tablet, turn on desktop mode!

8. Credits and Acknowledgement

The development of StuWin would not have been possible without the collaboration, effort, and shared vision of our dedicated team. We would like to take this opportunity to acknowledge the contributions of each member and express our gratitude to those who supported us along the way.

Project Title

StuWin – Student Academic Tracker and Planner

Course

CSCI 275 – Software Engineering
Instructor: Dr. Yvonne Yang
Columbia College, Summer 2025

8.1 Team Members and Roles

Name	Role & Contributions
Simranjot Singh Sidhu	GPA Tracking Module, Score Suggestion, Graphs, Email Reminders, Documentation editing
Mehakdeep Kaur Boparai	Notes Uploading Module, Google Drive Integration
Richa Sanjaykumar Rathod	Login System, Self-Reflection Journal, Reset Password, UI Feedback

Name	Role & Contributions
Dorsey Bangarh	Task Reminder Module, Mailgun Integration, Frontend Animations
Minn Thant Oo	Calendar Sync using Google API, FullCalendar UI, Event Management
Jasmine Kaur	Course Planning Module, Gemini AI Integration, Degree Audit Logic

8.2 Special Thanks:

- **Dr. Yvonne Yang**
  For providing us with the knowledge, flexibility, and structure to design and implement this software project. Your detailed feedback helped us improve our use cases, testing strategy, and UML architecture.
- **Columbia College Faculty & Advisors**
  For sharing insight during interviews that shaped our problem domain and functional goals. Special thanks to:
    1. Mandy Chung (academic advisor) for helping with academic advisory tips
    2. Shanna Meunier and Jeannie Benett (librarians) for providing feedback on “Study-Session” feature
    3. Jetic Gu (CSCI instructor) for providing feedback for which softwares to use, and other minor detail.
- **Test Users**
  Fellow students who participated in informal interviews and testing to validate usability and providing feedback.

- **YOU!**
  For trusting us and using our website for your academic success!
  And for helping us grow with your own success.

Thank you everyone during this process of making StuWin!

8.3 Technologies & Services Used:

Tool / API (With Doc Links)	Purpose
Python (Flask)	Backend web framework
MySQL	Local database system
Google Gemini API	AI-based study schedule generator
Google Drive API	File storage and note handling
Google Calendar API	Event planning and reminders
Mailgun API	Automatic email sending for reminders
Spotipy	Spotify integration during study sessions
FullCalendar.js	Dynamic frontend calendar interface
Pandas, Matplotlib	Graph plotting and data handling

8.4 Final Words:

StuWin was not just a project, but a shared journey of learning, collaboration, and creativity.

We dedicate this tool to every student striving to manage their time, improve their performance, and take control of their education.

9. Terms of Use and License

StuWin is an academic project developed by students of Columbia College as part of the Software Engineering course (CSCI 275). It is made publicly accessible **for educational and non-commercial use only**.

By downloading, using, or modifying StuWin, you agree to the following terms:

9.1 Open Source and Usage Rights:

StuWin is released as an open educational tool.

You are free to:

- Use the system locally for personal academic planning
- Study the code for learning purposes
- Customize it for your individual use/edit your API keys

You may also share the original (unmodified) version with proper credits to our team.

9.2 What You Cannot Do Without Permission:

You are not allowed to:

- Sell or commercially redistribute this software
- Claim authorship or ownership of any part of this system

- Modify and republish this tool under a different name
- Remove or overwrite the credits or license section
- Use this tool for unethical data collection or surveillance
- Upload the tool to public repositories like GitHub without attribution

9.3 Attribution and Credit:

If you plan to build upon StuWin or showcase it (e.g., in portfolios, workshops, or GitHub):

You must include the following credit clearly:

"Originally developed as a student project (StuWin) at Columbia College, Summer 2025 by Simranjot Singh Sidhu and team, under the supervision of Dr. Yvonne Yang (CSCI 275)."

9.4 Warranty Disclaimer:

StuWin is provided as-is, without any warranties or guarantees.
We are not responsible for data loss, errors in calculation, or third-party service outages (e.g., Google API, Mailgun).

This system is intended strictly for demo and academic use and should not be used for storing sensitive or personal information in production environments.

The Server not running depends on many factors such as MySQL server, Googe down status, APIs, such as MailGun not working, flask server is itself in maintenance.

If you are concerned about privacy, for more information, see the terms and conditions of these third-party APIs.

10. Final Remarks and Future Plans

StuWin was developed with the goal of helping students take control of their academic journey — not only by tracking grades but also by improving time management, reflection, and planning.

From alpha version to version 1 to now currently version 16.6, we've come a long way.

But still, we are not done, here's our future plan and road map:

10.1 Future Plan:

Some planned upgrades for the future include:

- Graph export as PDF
- 10.Journal auto-export and printing
- AI-powered course conflict checker
- Daily reminder summary email
- More Support for colleges for Course Planning
- More Support for colleges with different grading system for GPA calculation
- Dark Mode
- Dynamic background changing wallpapers (work in progress)

10.2 How You Can Contribute

If you are a student, developer, or teacher interested in expanding StuWin:

- Reach out to the original team (emails on website)
- Respect the licensing terms
- Propose improvements or submit bugs (if hosted on GitHub in the future)

10.3 A Message from the Developers

This project reflects everything we learned — not just about coding, but about teamwork, planning, design, and perseverance.

We hope StuWin helps you plan your future, as much as building it helped us shape ours.