SMART STUDY PLANNER

Make time work for you

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Description

The Smart Study Planner is an application that receives date (User personal information, Module information, semester information). Once this information is obtained, the system calculates the required study hours for the entire semester, the required study hours per week, and any study hours that were missed or not obtained in the previous weeks. The system allows the user to view their modules and study hours for the semester. The system records any study sessions that were recorded, simultaneously updating the required hours. It allows users to view their previous study sessions. Furthermore, the system allows users to adjust their personal information, add and delete modules and view their study hours for the semester. The system refreshes the required study hours weekly, such that the system can continuously run.

Assumptions

I assumed that the semester start date can either start on the current date, any future date, and past dates. Additionally, I deduced that a user could record a study session on any date, including current and past dates, excluding future dates. I assumed that the maximum number of credits for a module is 1000, as it was not indicated. Furthermore, I had the maximum number of class hours per week to 168 (7 days x 24 hours).

Prerequisites

- Visual Studio 2019

Computer requirements:

- 1.8 GHz or faster processor. Quad-core or better recommended.
- 2 GB of RAM; 8 GB of RAM recommended
- Hard disk Space: Minimum of 800MB up to 210 GB of available space.

To successfully run this application, you will require Visual Studio 2019 on your device with the following Workloads attached: .NET desktop development & Universal Windows Platform development.

- It is required to run the application on 1920 x 1080 Display resolution, at 100% scaling. However, the application will not appear correctly on smaller resolution screens.
- Please note when running the application on some computers the icon error may appear. To overcome this, please comment the line by using "//". On some devices it does not recognize the icon.

Installation

Link for the installation for Visual Studio 2019 : https://visualstudio.microsoft.com/downloads/

Link for the installation tutorial for Visual Studio 2019: https://www.youtube.com/watch?v=FBo5Cso-ufE

- Once you have clicked the above link, it will redirect you to the Microsoft Visual Studio 2019 downloader.
- Please select between the three download options. (The community version is preferable).

- Save the file and wait until the file has been installed.
- Run the .exe installation file.
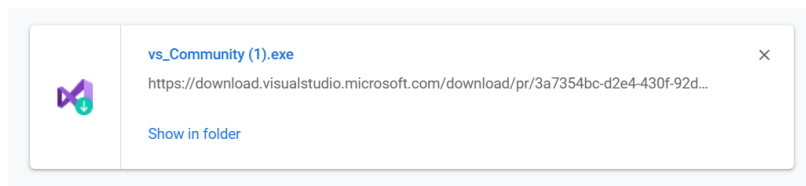
- Wait until the process for configuration is completed.
- Please select the following workloads: .NET desktop development & Universal Windows Platform development. Once selected click install.
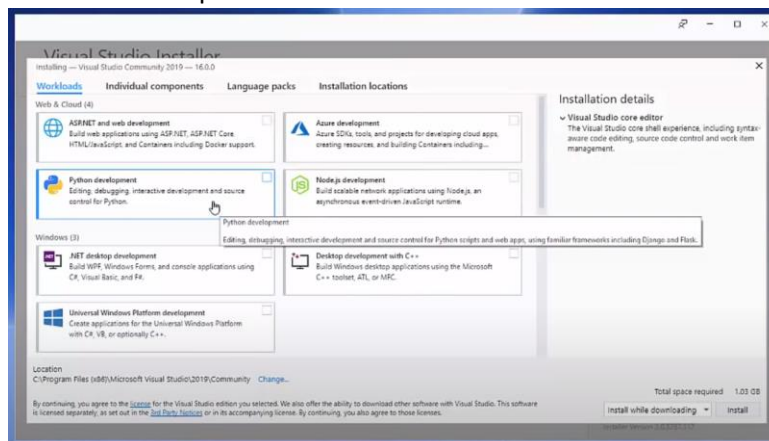
- Once the installation is complete, it will prompt you to restart/reboot your computer.
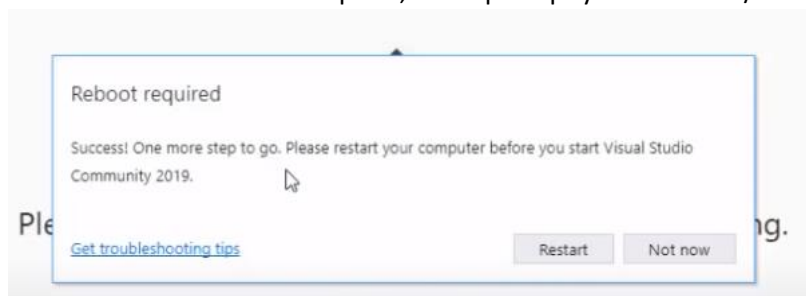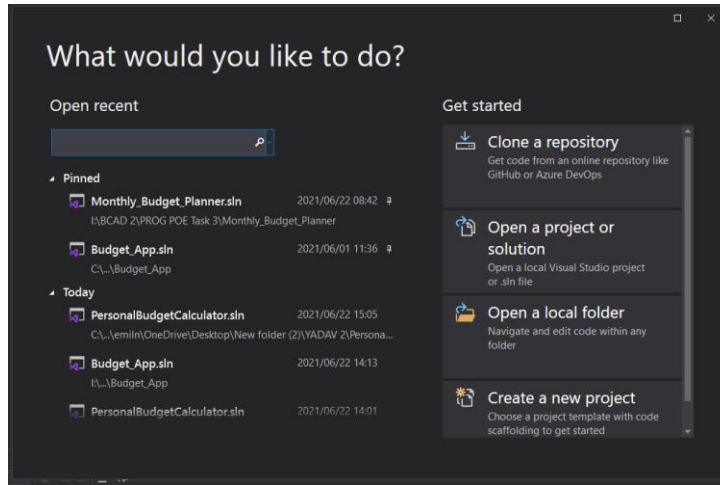

- Reboot your computer.
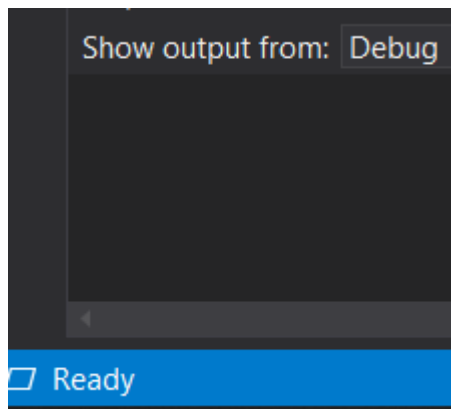- Once rebooted, you can open Visual Studio 2019.

Deployment

Method 1

- Open Visual Studio 2019.
- Click "Open a project or solution" and locate the project folder

- Open the project folder. Click "POE Task 1.sln"

- Wait until the project has successfully loaded. (In the bottom right, it will say Ready)

- The project is now open. Click the green triangle button "POE Task 1.sln"
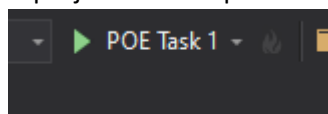
- The project will now run.

Method 2

- Open the project folder.
- Open the file "Smart_Study_Planner"

Name	Date modified	Type	Size
.vs	2021/08/10 12:09	File folder	
bin	2021/08/10 12:10	File folder	
Icons	2021/08/13 10:30	File folder	
obj	2021/08/10 12:10	File folder	
POE Task 1	2021/08/10 12:08	File folder	
App.xaml	2021/08/10 12:08	Windows Markup ...	1 KB
App.xaml.cs	2021/08/10 12:08	C# Source File	1 KB
AssemblyInfo.cs	2021/08/10 12:09	C# Source File	1 KB
Group 1.png	2021/09/15 14:50	PNG File	299 KB
MainWindow.xaml	2021/09/16 20:32	Windows Markup ...	23 KB
MainWindow.xaml.cs	2021/09/16 20:32	C# Source File	45 KB
Smart_Study_Planner.csproj	2021/09/16 14:43	C# Project file	1 KB
Smart_Study_Planner.csproj.user	2021/09/15 18:01	Per-User Project O...	1 KB
POE Task 1.sln	2021/09/17 08:51	Visual Studio Solu...	2 KB
Splash Screen 1.png	2021/09/14 09:06	PNG File	596 KB
Splash Screen 2.png	2021/09/14 09:23	PNG File	251 KB
study_app.ico	2021/09/15 23:17	Icon File	67 KB
user_circle.png	2021/09/09 16:26	PNG File	1 KB
UtilClass.cs	2021/09/16 14:07	C# Source File	11 KB

- Open the "bin" folder following the "debug" folder.

Name	Date modified	Type
net5.0-windows	2021/08/10 12:10	File folder

• Open the "net5.0-windows" folder.

Name	Date modified	Type	Size
ref	2021/08/10 12:10	File folder	
Smart_Study_Planner.deps.json	2021/09/17 08:52	JSON File	1 KB
Smart_Study_Planner.dll	2021/09/17 08:52	Application exten...	370 KB
Smart_Study_Planner.exe	2021/09/17 08:52	Application	189 KB
Smart_Study_Planner.pdb	2021/09/17 08:52	Program Debug D...	23 KB
Smart_Study_Planner.runtimeconfig.dev....	2021/09/17 08:52	JSON File	1 KB
Smart_Study_Planner.runtimeconfig.json	2021/09/17 08:52	JSON File	1 KB
Study_Library.dll	2021/09/16 13:32	Application exten...	7 KB
Study_Library.pdb	2021/09/16 13:32	Program Debug D...	12 KB

• Run "Smart_Study_Planner.exe"

How to use the application

• Run the application.
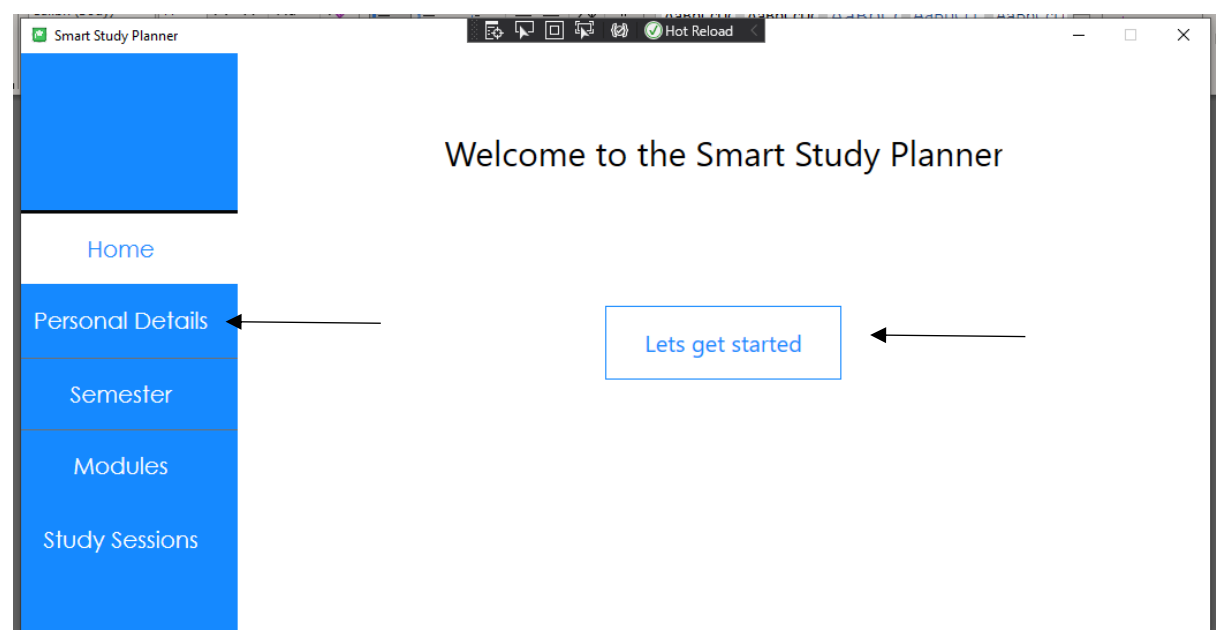
• Once the application opens, it requires you to click the "Lets get started" or "Personal Details"button.

- Once "Lets get started" or "Personal details" has been clicked, the Personal Details page will appear. Proceed to complete all fields on this page and click "Next" to proceed.

- Once you click "Next" on the Personal Details form, it will validate your information. If correct, the system will display a pop-up message stating that your information has been recorded and it will show your profile details on the top left on the page.

• Proceed to complete the fields on the "Semester" form. To select a start date, please click the calendar icon. Once all information is correct, proceed to click Next.

• Once all fields have been validated, a pop-up message will appear stating that you semester information has been recorded.

• Please complete the required fields for Modules. Once all fields are complete, proceed to click "Add Module". "Next" will display an alert message stating that no module has been recorded.
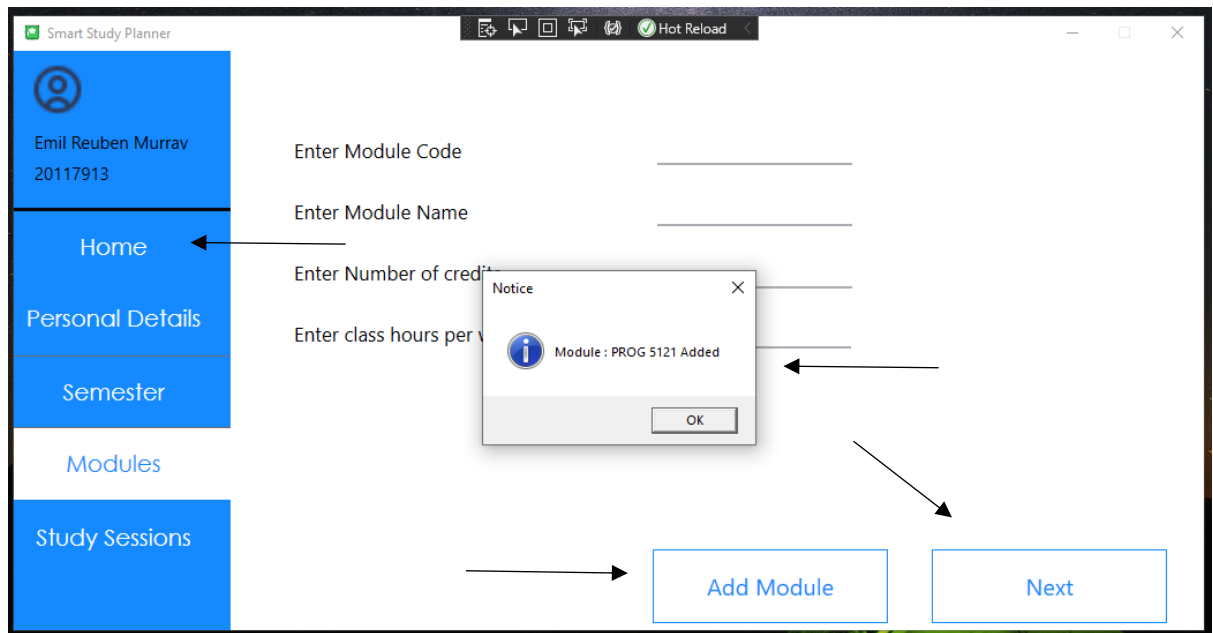
• Once a Module has been added, proceed to click Next or Home.
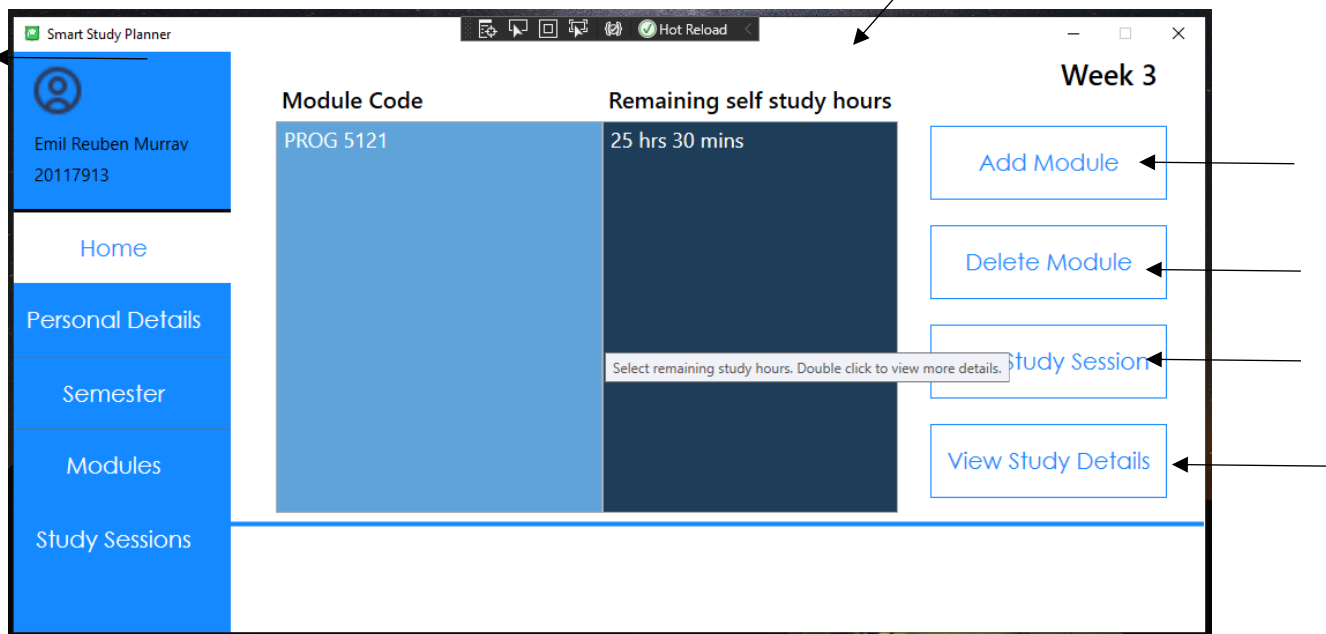
• If Home or Next is clicked, it will bring you to the Dashboard. The Dashboard displays all your current and added modules as well as the remaining study hours for that module.

- On the Dashboard, it allows you to Add a Module, by clicking Add Module.
- The system allows you to delete a selected module. Firstly, select a Module, then proceed to click Delete Module. A confirmation message prompt will appear. If Yes is selected it will delete the module and if No is selected then it will cancel the delete process. If no module is selected, the system will prompt you to select a module.

- Deleted Module.
- To add a study session, please select a Module Code, then proceed to click Add study session. If a Module Code is not selected, the system shall prompt you to select a Module.
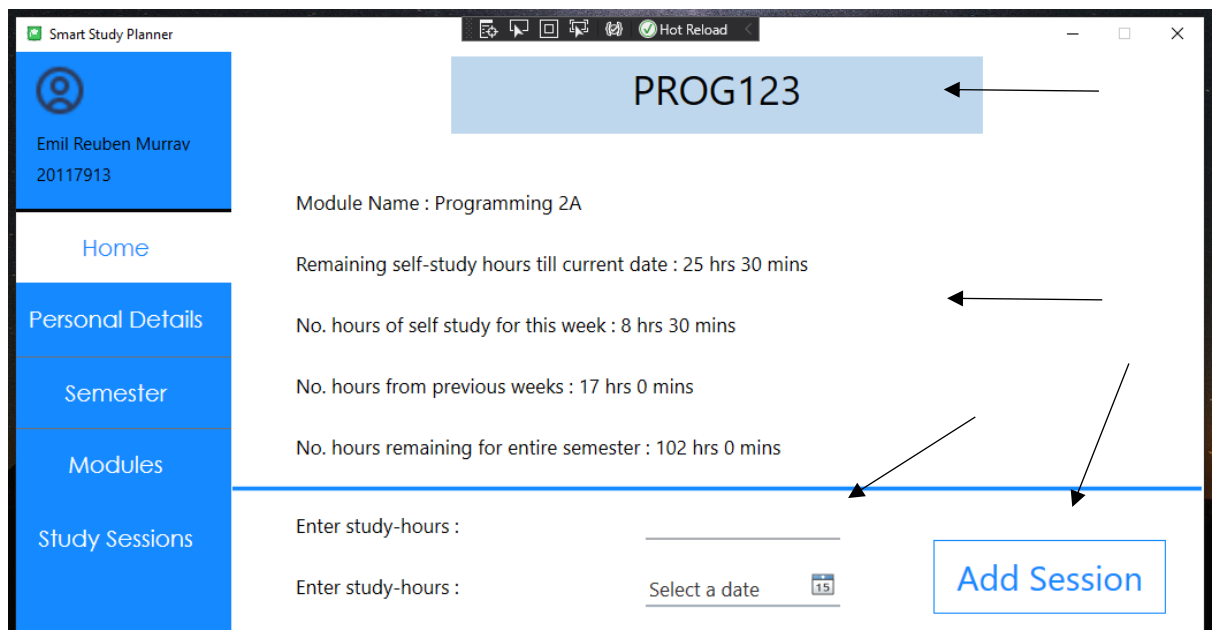
- This is the studying Form on the Home Page. This form shows all related study details to the selected module. Please complete the 2 fields on this form and proceed to click Add Session.

• Once validated, a message prompt will appear stating the session has been recorded.

• The No. of hours will update as soon as a session has been recorded, both on this form and the Home page. If you would like to go back to the Dashboard proceed to click Home.
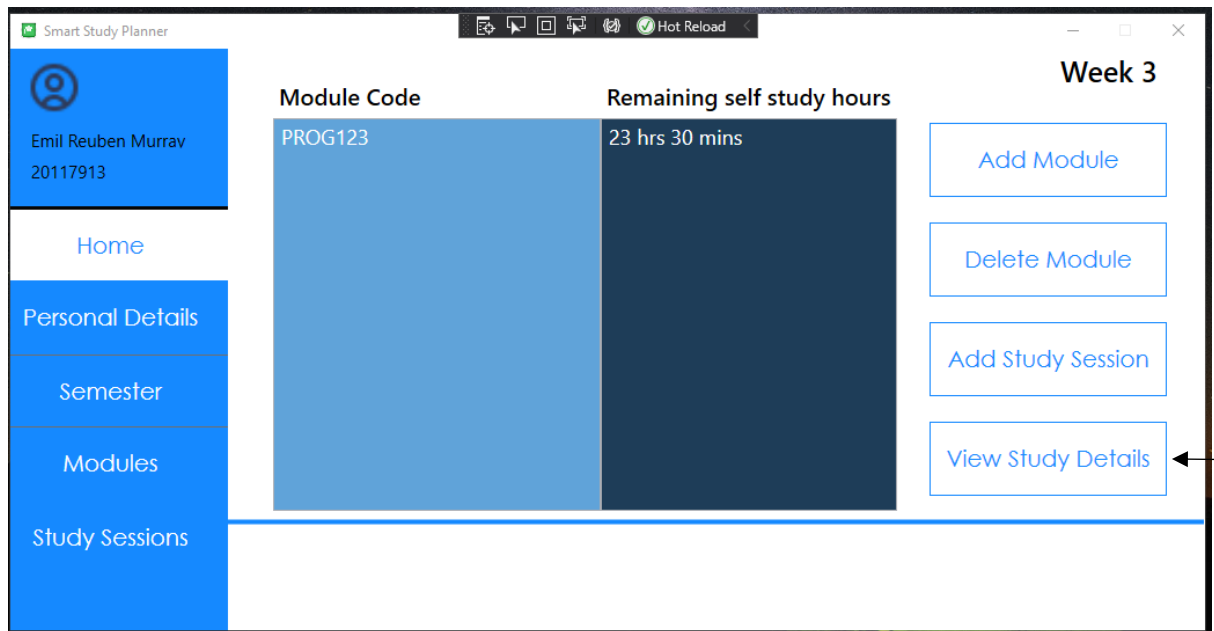
- To View study Details, please select a Remaining self-study hours item, then proceed to click View Study Details.
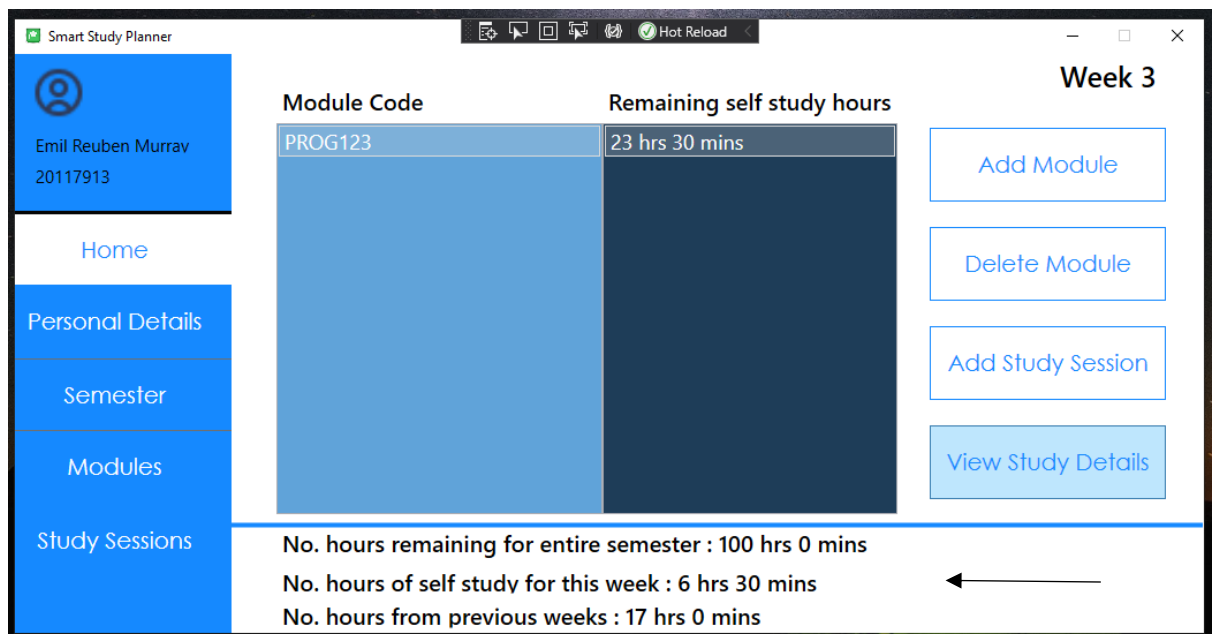
- To view all your study sessions, proceed to click Study Sessions on the Side bar.

• The study sessions page will appear, showing all study sessions that were recorded.

- On the study sessions page, you can print and save the recorded study sessions. To print your recorded study sessions click the Printer icon.
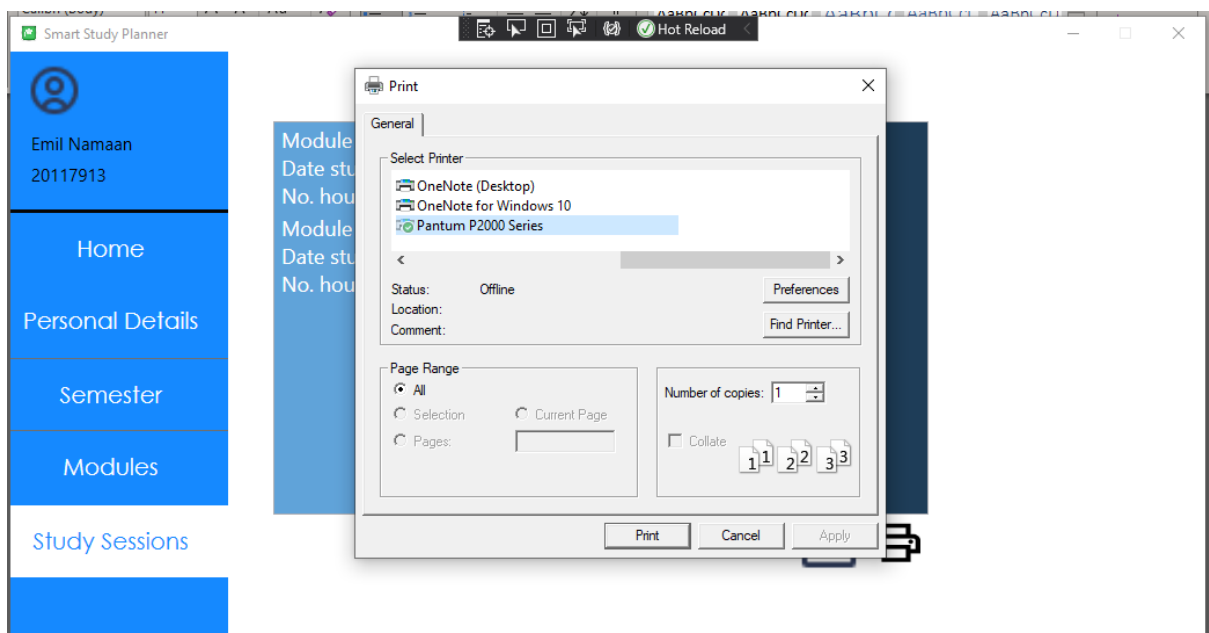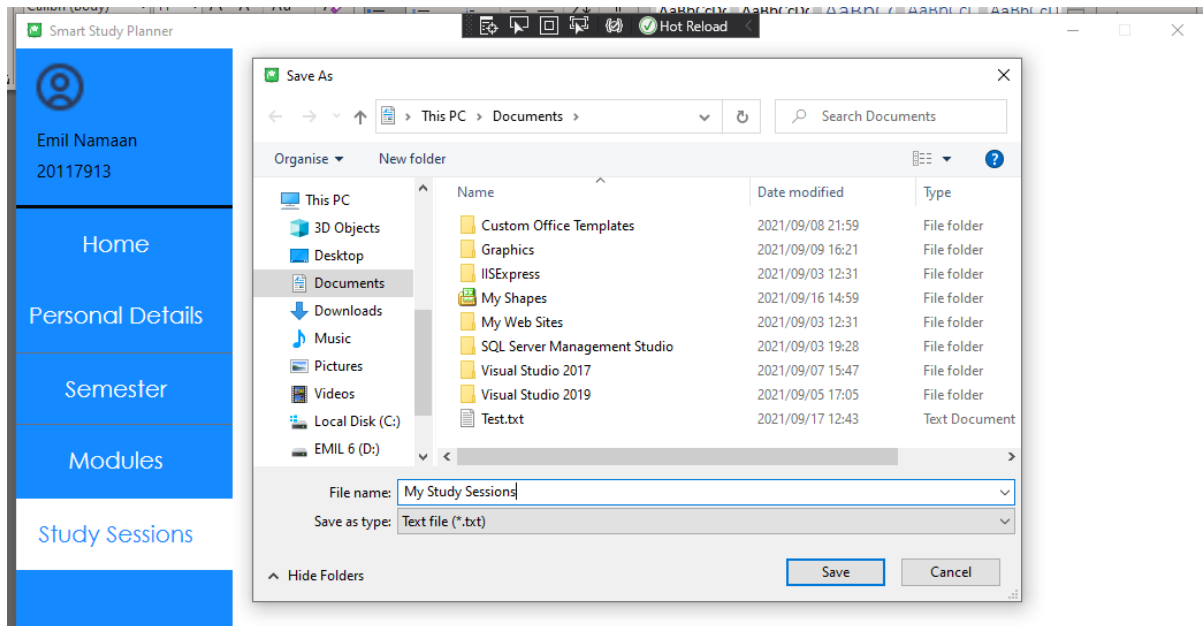

- Select a printer and adjust any settings, proceed to click Print. Ensure that your printer is plugged in or connected wirelessly.

- To save your study sessions, click the save icon. A file explorer dialogue will appear requestion you choose a save file location and name of the file. Once the file is named and the location is valid, click save.
- It will alert the user if a field is invalid with a *.
- You can freely move through each page by using the navigation page on the left of the screen.

Usage

Here is an example of the sample input.
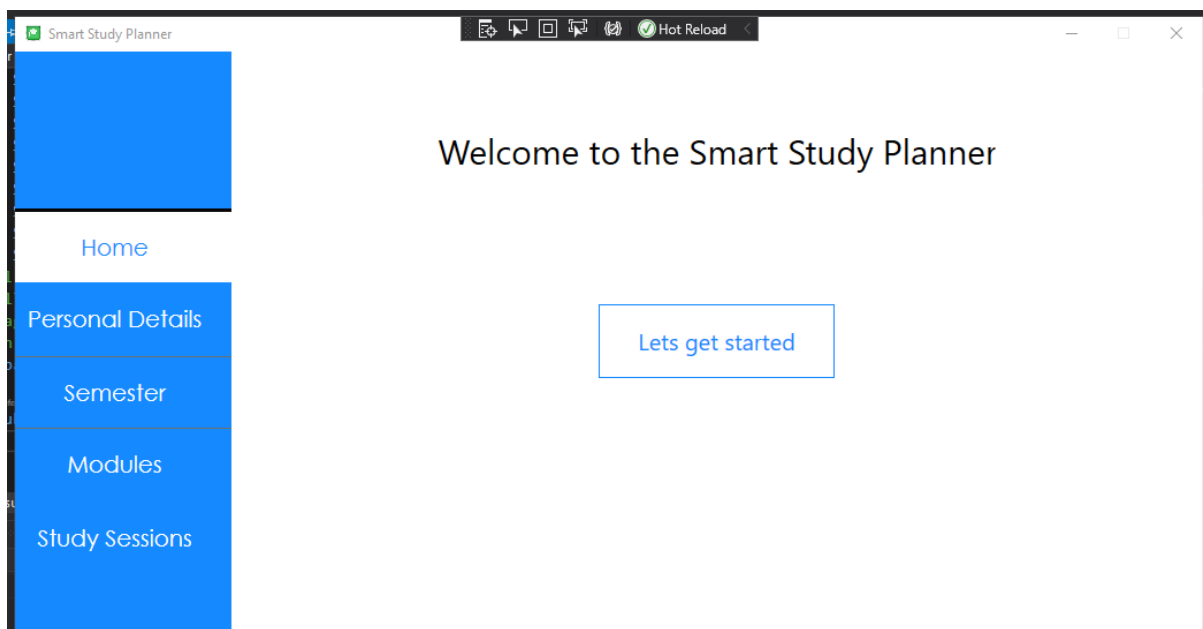
Smart Study Planner

Emil
20117913

- Home
- Personal Details
- Semester
- Modules
- Study Sessions

Enter student number   20117913

Enter first name   Emil

Enter surname   Reuben Murray

Enter name of institute/ University   Varsity College

[Next]

Smart Study Planner

Emil
20117913

- Home
- Personal Details
- Semester
- Modules
- Study Sessions

Enter number of weeks in the semester   12

Enter start date of the semester   2021/09/01

[Next]

Emil
20117913

Home

Personal Details

Semester

Modules

Study Sessions

Enter Module Code   PROG6212

Enter Module Name   Programming 2A

Enter Number of credits   15

Enter class hours per week   4

Add Module   **Next**

Smart Study Planner

Emil
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Home

Personal Details

Semester

Modules

Study Sessions

Enter Module Code   DBAS

Enter Module Name   Databases

Enter Number of credits   20

Enter class hours per week   3

Add Module   **Next**

Smart Study Planner

Window 1 — Home

Module Code	Remaining self study hours	Week 3
PROG6212	25 hrs 30 mins	
DBAS	41 hrs 0 mins	

Select a Module. Double click to add a study session.

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- Home
- Personal Details
- Semester
- Modules
- Study Sessions

Buttons:
- Add Module
- Delete Module
- Add Study Session
- View Study Details

Window 2 — PROG6212

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- Home
- Personal Details
- Semester
- Modules
- Study Sessions

PROG6212

Module Name : Programming 2A

Remaining self-study hours till current date : 25 hrs 30 mins

No. hours of self study for this week : 8 hrs 30 mins

No. hours from previous weeks : 17 hrs 0 mins

No. hours remaining for entire semester : 102 hrs 0 mins

Enter study-hours :   2

Enter study-hours :   2021/09/08

Add Session

Smart Study Planner

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Home

Personal Details

Semester

Modules

Study Sessions

Week 3

Module Code	Remaining self study hours
PROG6212	23 hrs 30 mins
DBAS	41 hrs 0 mins

Select a Module. Double click to add a study session.

Add Module

Delete Module

Add Study Session

View Study Details

Smart Study Planner

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20117913

Home

Personal Details

Semester

Modules

Study Sessions

Week 3

Module Code	Remaining self study hours
PROG6212	23 hrs 30 mins
DBAS	41 hrs 0 mins

Add Module

Delete Module

Add Study Session

View Study Details

No. hours remaining for entire semester : 100 hrs 0 mins

No. hours of self study for this week : 6 hrs 30 mins

No. hours from previous weeks : 17 hrs 0 mins

Support

If you require any assistance, please feel free to send an email to the following address : 20117913@vcconnect.co.za.

Acknowledgements

- How to Download and Install Visual Studio 2019. 2019. YouTube video, added by ProgrammingKnowledge. [Online]. Available at: https://www.youtube.com/watch?v=FBo5Cso-ufE [Accessed 17 April 2021]
- Image reference: Max Pixel, 2021. Abstract Graphic Background Pattern Design. [image] Available at: <https://www.maxpixel.net/Abstract-Graphic-Background-Pattern-Design-2829965> [Accessed 15 September 2021].
- Icon picture : findicons.2020. Study App Icon. [Online]. Available at: https://findicons.com/icon/585329/study_app [Accessed on 14 September 2021]

Authors

- Emil Namaan Reuben Murray