National College of Ireland

Configuration Manual

MSc Internship
Cyber Security

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MSc Project Submission Sheet
School of Computing

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Configuration Manual

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This configuration manual showcases various tools that are used during the duration of this research. Instructions are provided on how to replicate the experiments that have been performed

1 Software Requirement

1.1 Visual studio

- Download and Install the latest version of Microsoft visual studio 2019 application from the registered website [1]
- Ensure that the "ASP.NET and web development" option as shown in Fig.1. is selected when performing the installation

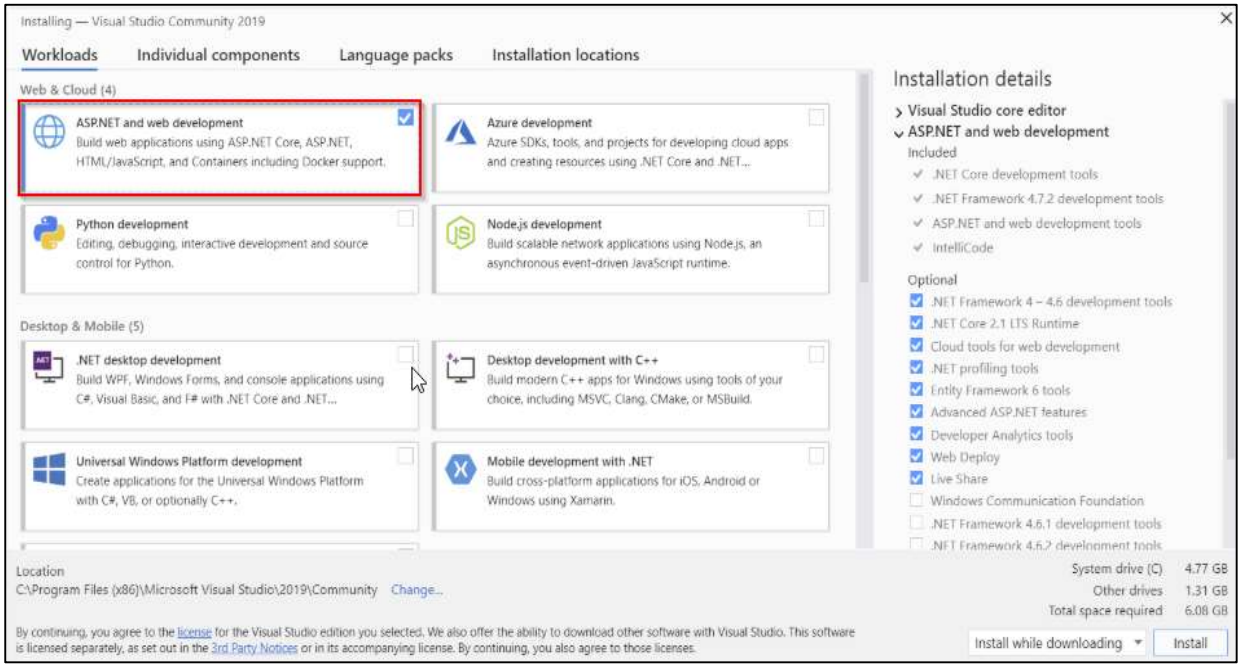

Fig.1.

1.2 Microsoft SQL server

- Download and Install the latest version of Microsoft SQL Server 2019 application from the registered website[2]
- Ensure that the "New SQL server stand-alone installation" option is selected when performing the installation as shown in Fig.2.

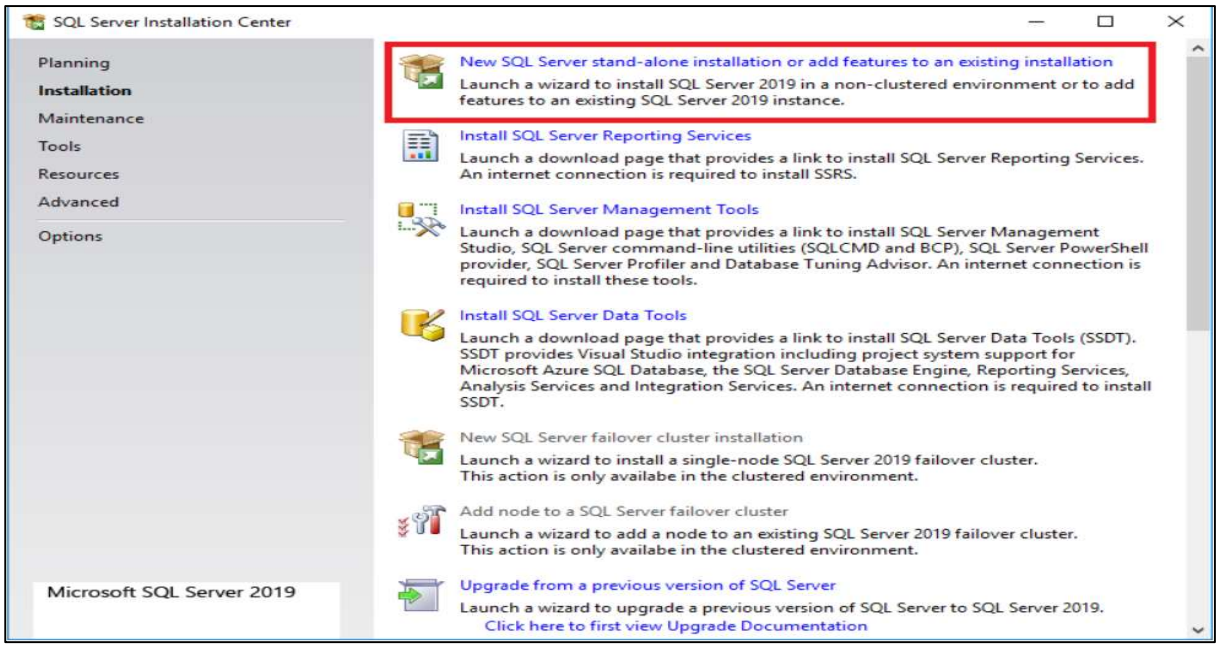

Fig.2.

- During installation process, ensure that the “Mixed Mode” in the Authentication Mode is selected and a password is entered, this password will be used for logging into the database console as show in Fig.3.

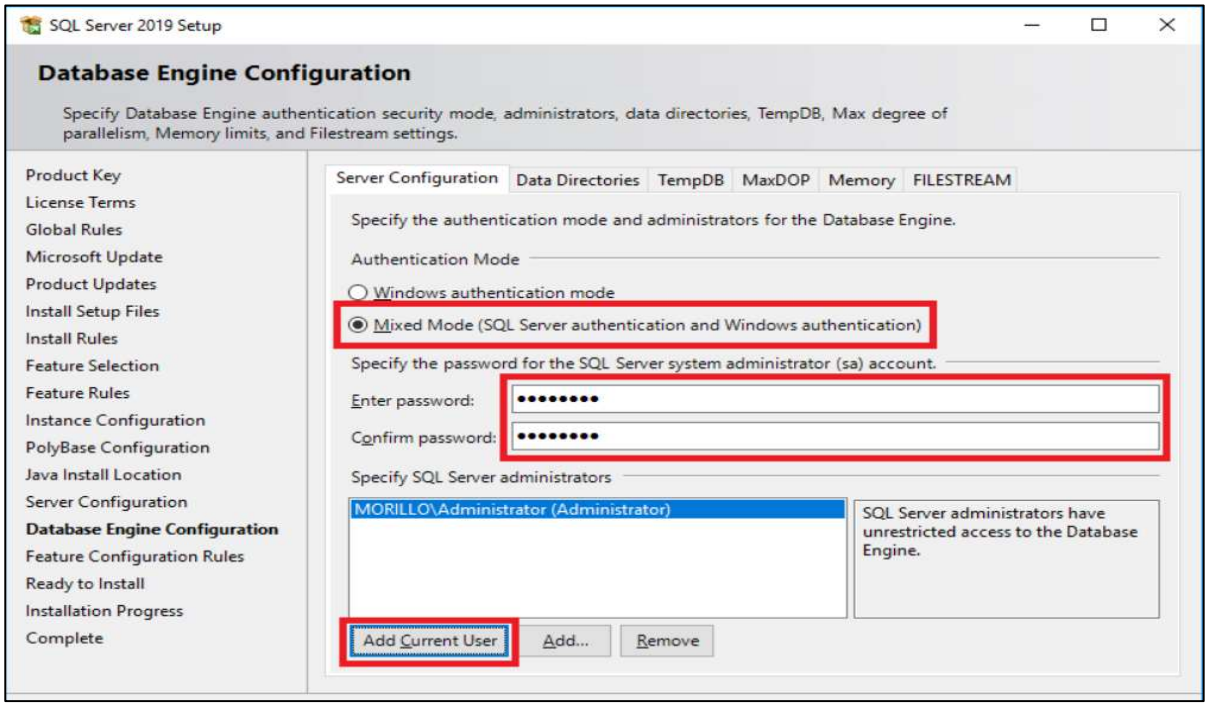

Fig.3.

1.3 Postman

- Download and Install the latest version of Postman application from the registered website[3]
- Once the installation is completed the application launches with the below interphase as shown in Fig.4.

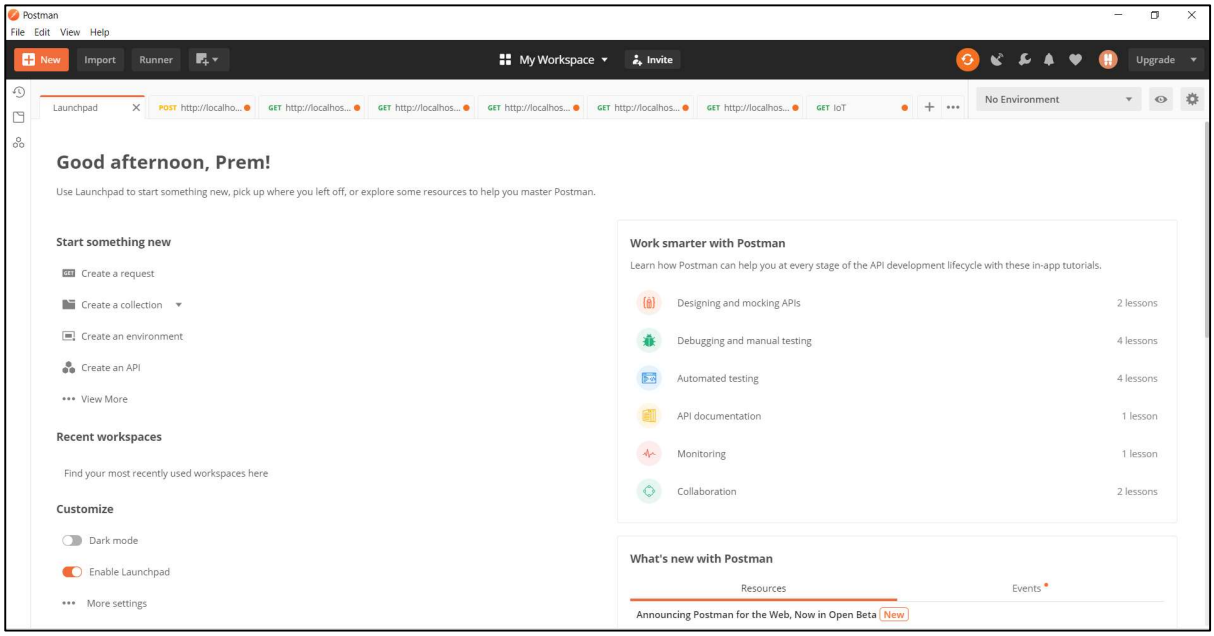

Fig.4.

2 Setup Procedure

2.1 Visual studio

- Navigate the file "**Web.config**" and add the server name that is generated during the SQL server installation under the option <**connectionStrings**>as shown in Fig.5.

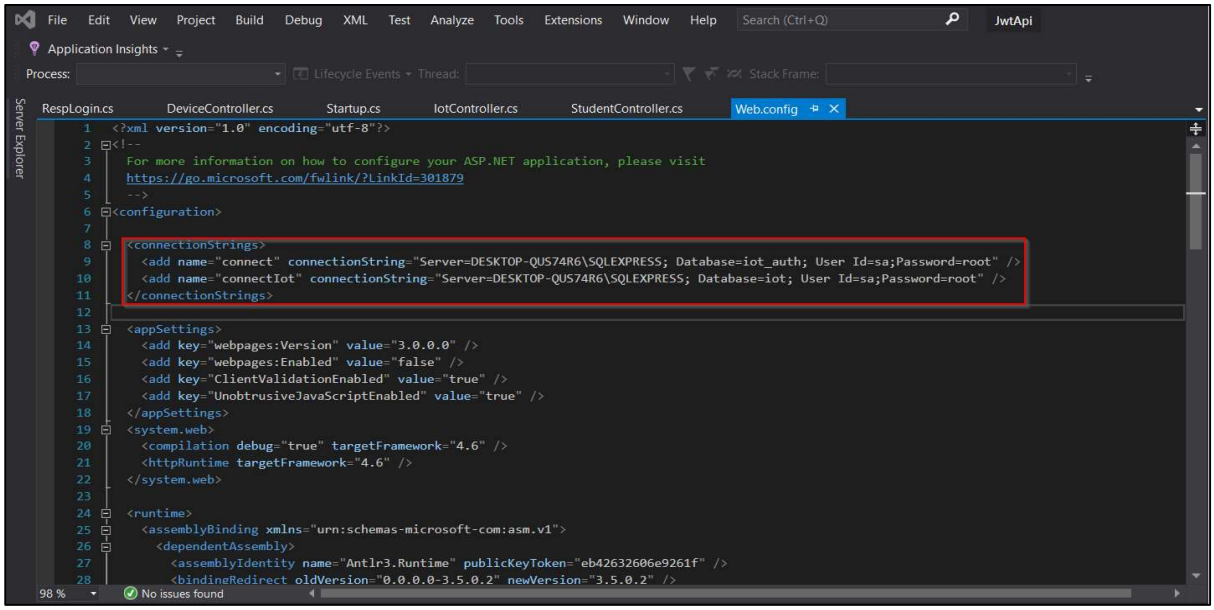

Fig.5.

- Navigate the file "**index.config**" and add "**http://localhost:<specify any available port number><code location>**" to the URL fields as shown in Fig.6.

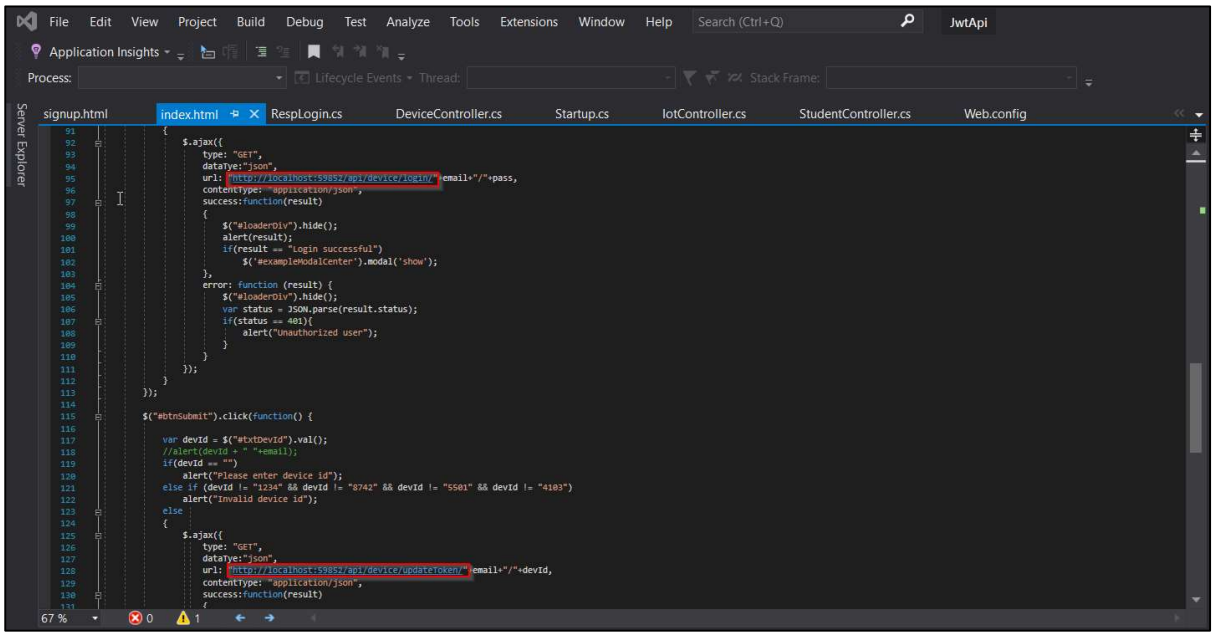

Fig.6.

- Navigate the file "**signup**" and add "**http://localhost:<specify any available port number><code location>**" to the URL fields as shown in Fig.7.

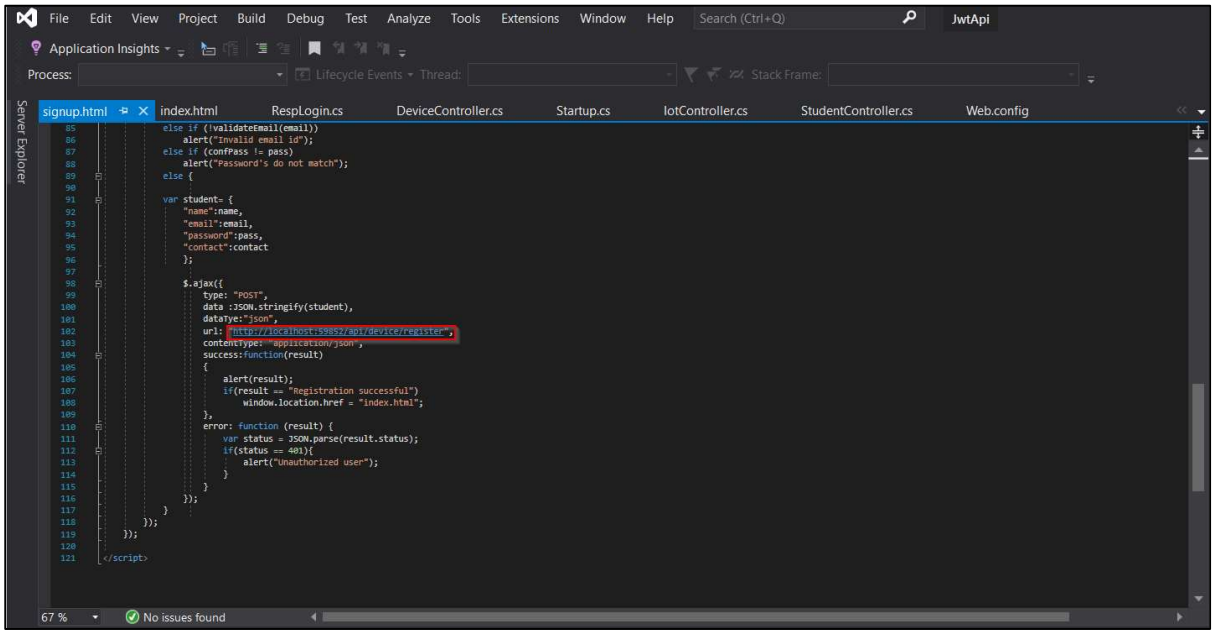

Fig.7.

2.2 Microsoft SQL server

- Navigate the Databases and Select the option “New Database” shown in Fig.8.

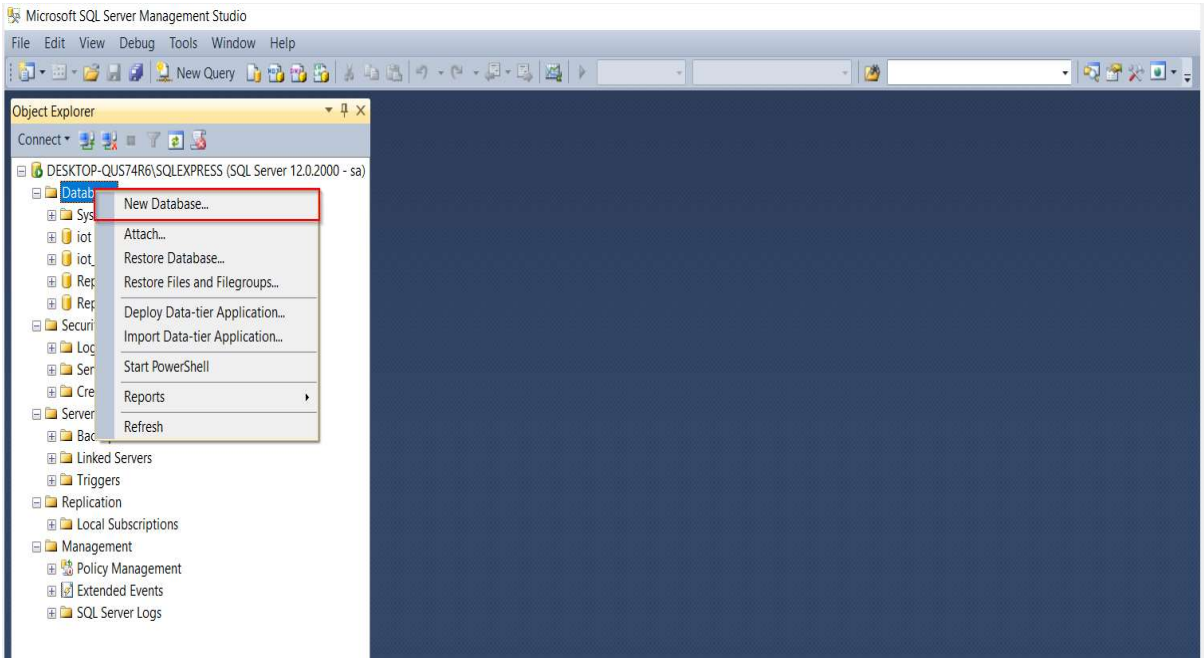

Fig.8.

- Import the tables “**iot.sql**” and “**iot_auth.sql**” from the source codeFig.9.

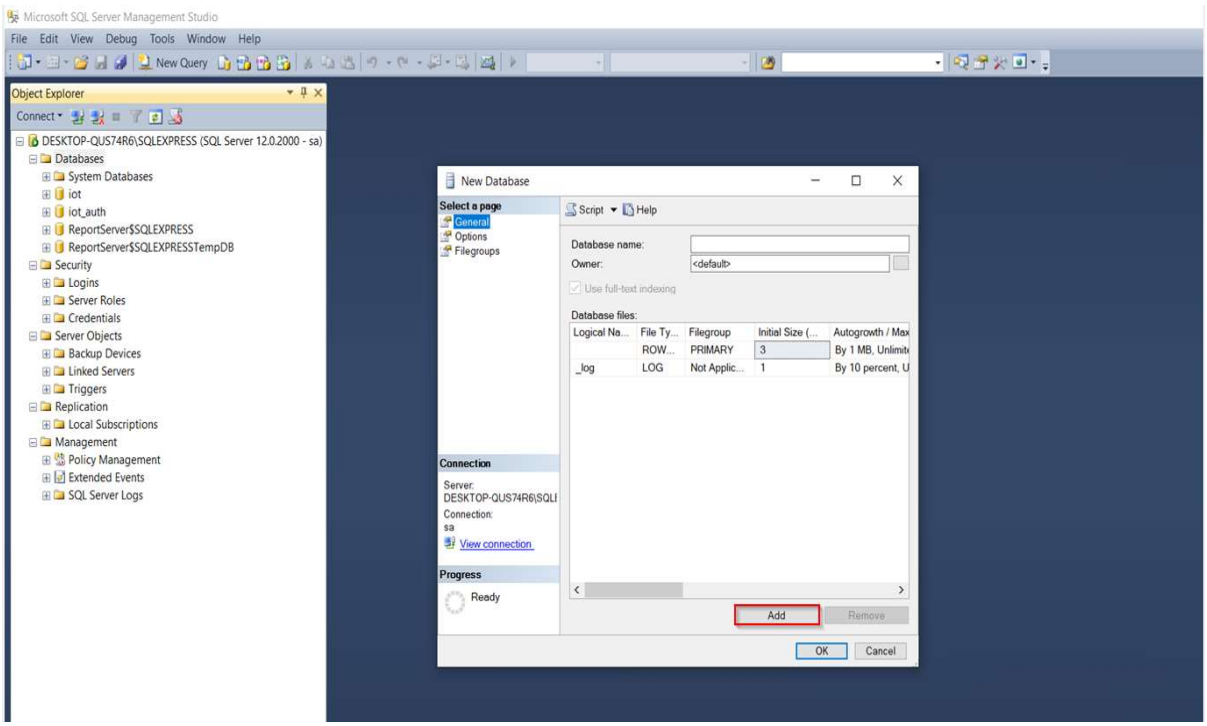

Fig.9.

2.3 Postman

- Navigate to the open “New” , select the option “Request” as shown in Fig.10.

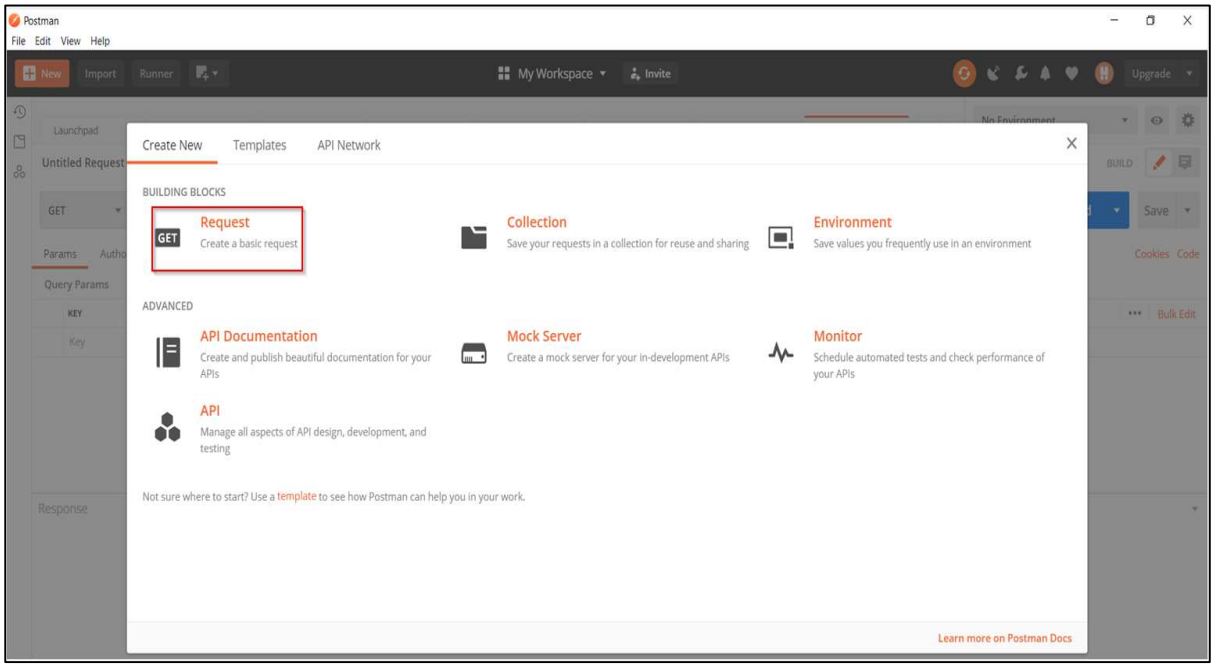

Fig.10.

- Create a Request name “IoT” as shown in Fig.11.

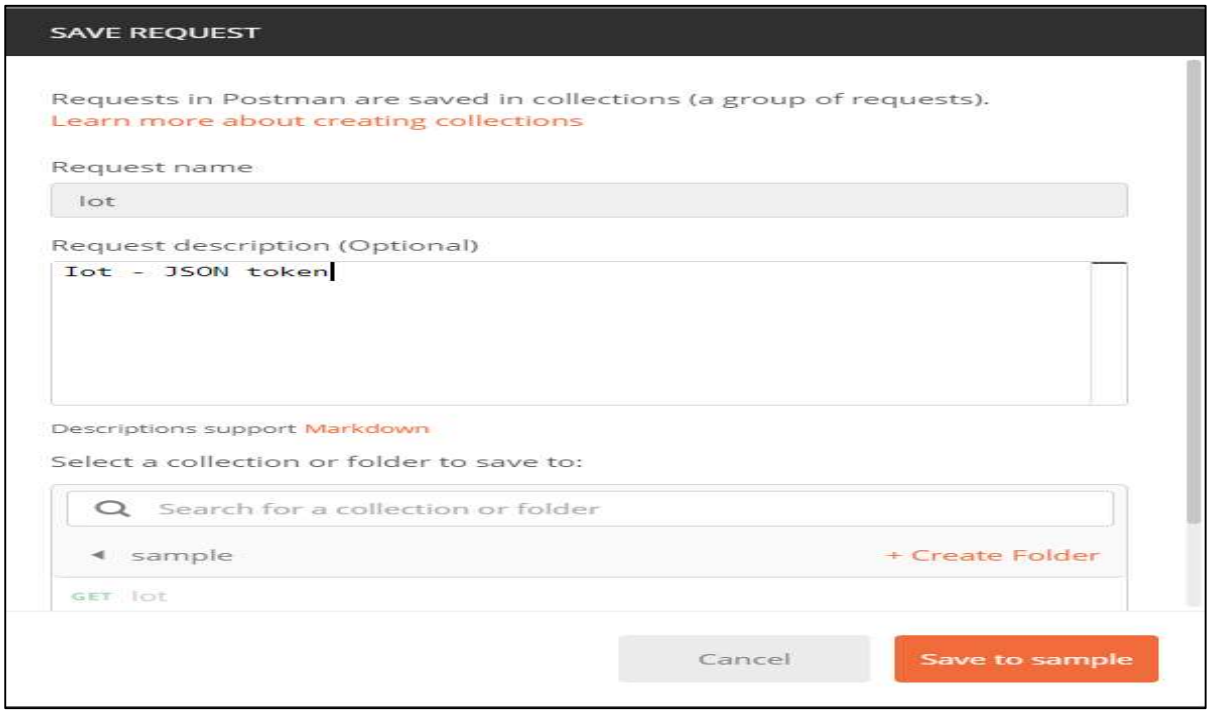

Fig.11.

- Once the request is created select the parameter “GET” in the navigation bar as shown in Fig.12.

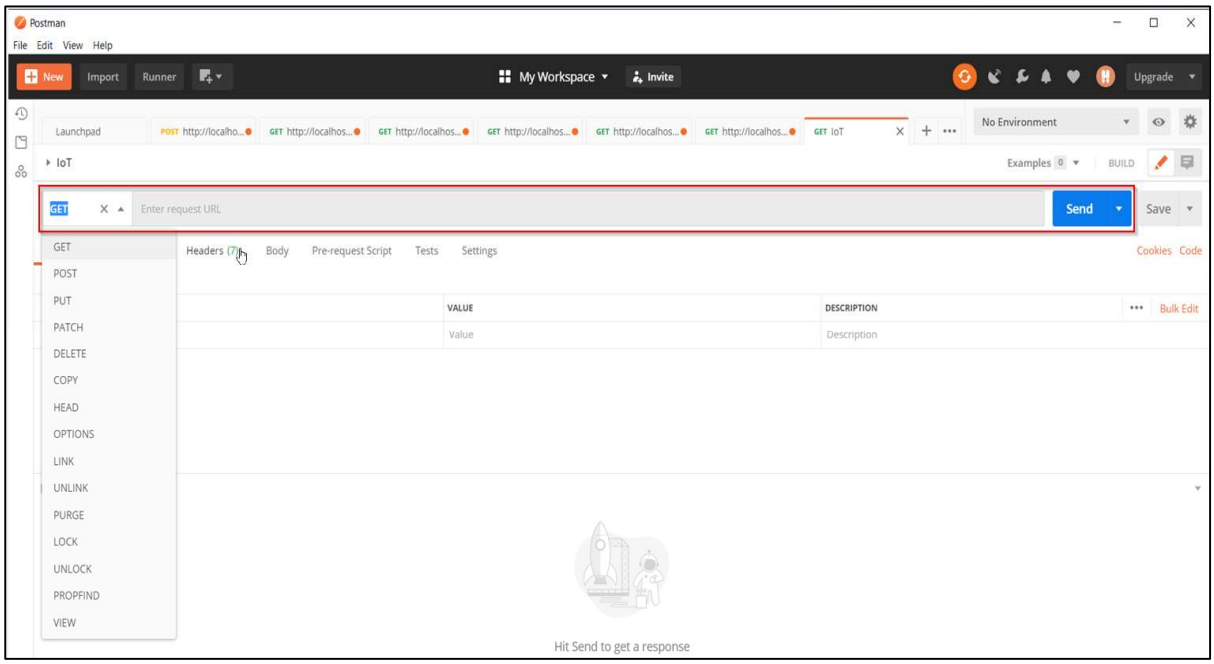

Fig.12.

3 Execution

- Navigate the Source code and to perform execution under the option “Build” select “Build Solution” this action is performed to compile the code as shown in Fig.13.

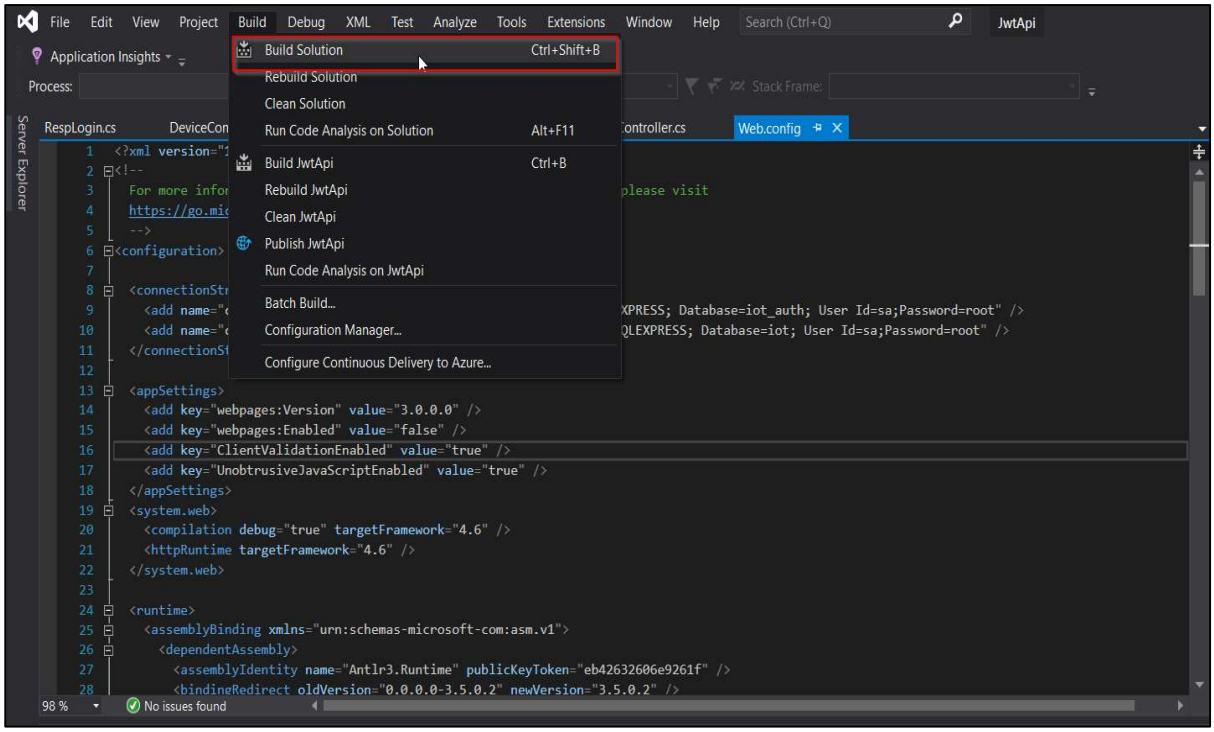

Fig.13.

- One the build is complete, to perform execution under the option “Debug” select the option “Start Without Debugging” as shown in Fig.14.

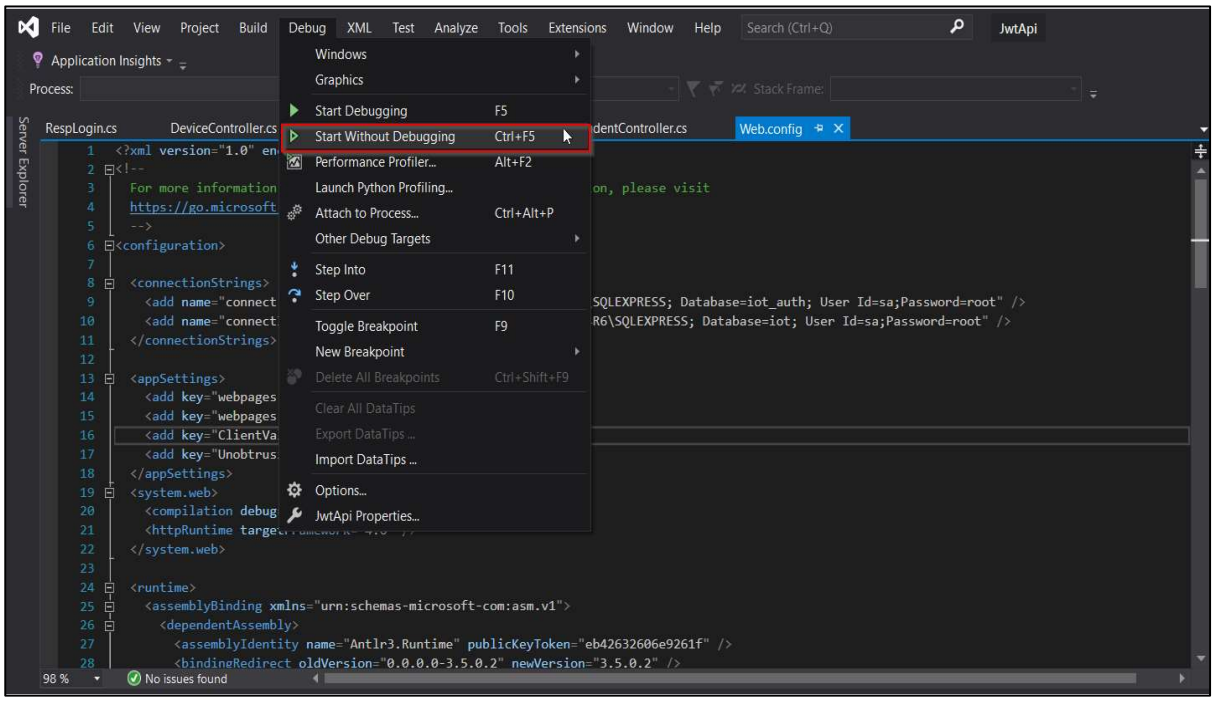

Fig.14.

- The application launches the index page ,Register and login to the application as shown in Fig.15.

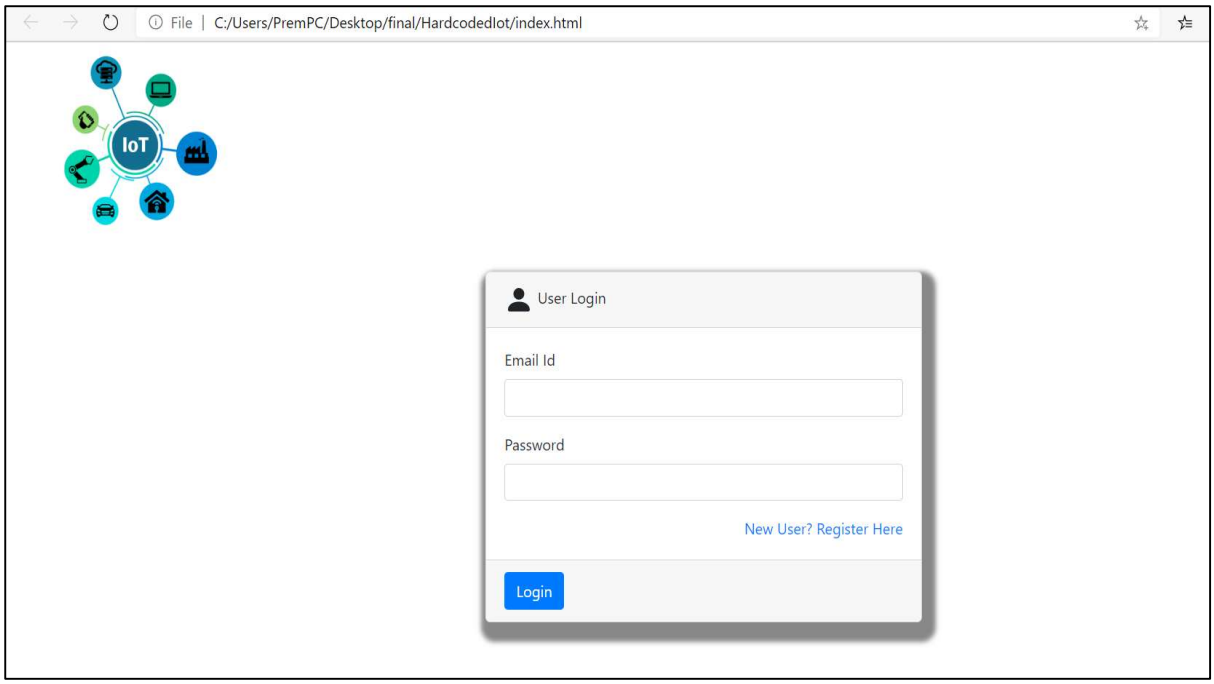

Fig.15.

- In Postman, parse the parameter **“http://localhost:59852/api/student/login/<userid>/<password>”** and the output is generated under the “**Body**” option as shown in Fig.16.

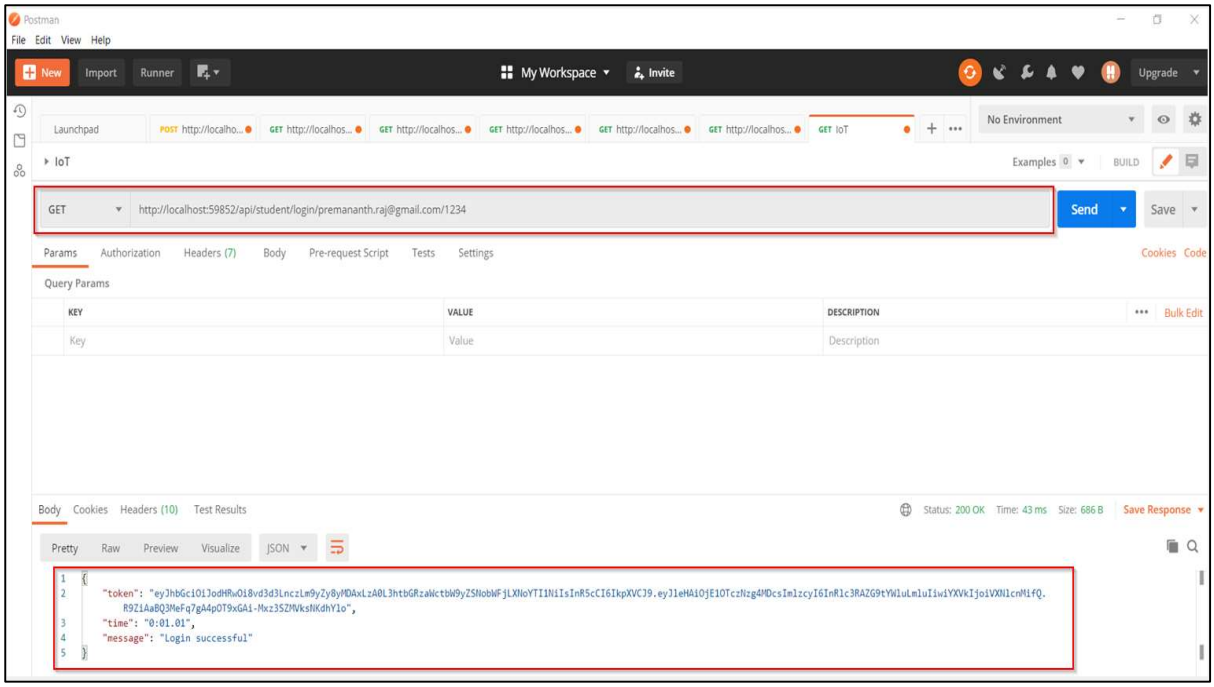

Fig.16.

References

[1] Docs.microsoft.com. 2020. Install Visual Studio. [online] Available at: <https://docs.microsoft.com/en-us/visualstudio/install/install-visual-studio?view=vs-2019> [Accessed 13 August 2020].

[2] Docs.microsoft.com. 2020. SQL Server Installation Guide - SQL Server. [online] Available at: <https://docs.microsoft.com/en-us/sql/database-engine/install-windows/install-sql-server?view=sql-server-ver15> [Accessed 13 August 2020].

[3] Postman.com. 2020. [online] Available at: <https://www.postman.com/downloads/> [Accessed 13 August 2020].