**CHAPTER 5**

**SOFTWARE DESCRIPTION**

**5.1 Front End**

**Visual Studio code**

**Visual Studio code** is a [source code editor](https://en.wikipedia.org/wiki/Source_code_editor) developed by [Microsoft](https://en.wikipedia.org/wiki/Microsoft) for [Windows](https://en.wikipedia.org/wiki/Windows), [Linux](https://en.wikipedia.org/wiki/Linux) and [macOS](https://en.wikipedia.org/wiki/MacOS). It includes support for [debugging](https://en.wikipedia.org/wiki/Debugging), embedded [Git](https://en.wikipedia.org/wiki/Git) control, [syntax highlighting](https://en.wikipedia.org/wiki/Syntax_highlighting), [intelligent code completion](https://en.wikipedia.org/wiki/Intelligent_code_completion), [snippets](https://en.wikipedia.org/wiki/Snippet_(programming)), and [code refactoring](https://en.wikipedia.org/wiki/Code_refactoring). It is also customizable, so users can change the editor's [theme](https://en.wikipedia.org/wiki/Theme_(computing)), [keyboard shortcuts](https://en.wikipedia.org/wiki/Keyboard_shortcut), and preferences. The source code is [free and open source](https://en.wikipedia.org/wiki/Free_and_open_source) and released under the permissive [MIT License](https://en.wikipedia.org/wiki/MIT_License). The compiled binaries are [freeware](https://en.wikipedia.org/wiki/Freeware) and free for private or commercial use.

Visual Studio Code is based on [Electron](https://en.wikipedia.org/wiki/Electron_(software_framework)), a framework which is used to deploy [Node.js](https://en.wikipedia.org/wiki/Node.js) applications for the desktop running on the [Blink layout engine](https://en.wikipedia.org/wiki/Blink_layout_engine). Although it uses the Electron framework, the software does not use [Atom](https://en.wikipedia.org/wiki/Atom_(text_editor)) and instead employs the same editor component (codenamed "Monaco") used in [Azure DevOps](https://en.wikipedia.org/wiki/Azure_DevOps) (formerly called Visual Studio Online and Visual Studio Team Services).

In the [Stack Overflow](https://en.wikipedia.org/wiki/Stack_Overflow) 2018 Developer Survey, Visual Studio Code was ranked the most popular developer environment tool, with 34.9% of 75,398 respondents claiming to use it.

**5.2 Back End**

**AWS-Cloud**

Amazon web service(AWS) is a secure cloud service platform, offering compute power, database storage, content delivery and other functionality to help business scale and grow. Explore how millions of customers are currently leveraging aws cloud products and solutions to build sophisticated applications with increased flexibility ,scalability and reliability. The Aws cloud provide a broad set of infrastructure services such as computing power storage option networking and databases, delivered as a utility on demand available in seconds , with pay as you go pricing.

**AWS Cloud Features:**

* Highly Scalable and cost effective.
* We can store and retrieve the data to and from the cloud at anytime from anywhere.
* Data will be highly secured in cloud and unauthorized access can be prevented.
* No need to spend money on running and maintaining data centers.