At the core of this project is the programming language that will be used to construction the functionality and operation of the software. Many programming languages exist that are publicly available to use and are suited for a variety of respective purposes and designs thus it is important to ensure that the right one for the project is selected for use. Languages that best t suit the specifications of managing a business include Python, Java Script and C#. Python is a relatively light and simple language, employing object-oriented programming, and its renown for being easy to handle, read and write with the ability to be ported and used with a variety of environments and operating systems. A notable downside of Python however is the lacklustre efficiency and performance that it can run due to optimisation compared to other alternatives. JavaScript as a language share many of the benefits that Python holds but with comparatively better performance and is exceptionally suited for web development. However, JavaScript is far less friendly, having generally worse structure and security as well as being more difficult to maintain. C# is a robust object-oriented language that is integrated with the Microsoft .NET framework and thus is rooted in the Windows operating system. Benefits of C# include its airtight design with a lack of worry for undiscovered errors to create problems as well as an extensive library of functions and classes to draw from during development. However, C# lacks the capacity of cross-platform and can prove to be restrictive in its robust design. With the requirements and timeframe of the project in mind, it is important to choose a language that is easy to work with and quick to learn, as well an efficient language is not needed as the project isn’t dependant on computational prowess. As well as the preference for a language that is largely compatible, the better option would be Python with JavaScript being too unwieldy and C# being too restrictive.

Along with languages many available Development environments present themselves as an attractive environment for developing software. Of course, the optimal Integrated Development Environment (IDE) is heavily dependant on what programming language you have selected to use, so with Python as our selection the options narrow down to PyCharm and Visual Studio Code. Both has very similar advantages such as their extensionality, debugging and testing performance as well as their lightweight designs however PyCharm has Python as its native language and thus its features are entirely concentrated towards our selected programming language with support and community resources for using Python with PyCharm would be far greater as well.

A functional software requires the correct choice of database software for the management system with choices including MySQL, Microsoft Access and SQLite. MySQL is a very commonly used database solution with high-end functionality, well supported and compatible. Access is a more basic database software that has less functionality than its traditional alternatives, with that said it’s not much of an option. SQLite is a very similar Database software to MySQL of course, however with the difference in being focused on its lightweight design. SQLite is hardly suited to projects of a larger scale however considering that ours does not fit that description SQLite would make a good option. SQLite has minimal requirements being both fast and responsive.