**3.LITERATURE SURVEY**

**3.1 Introduction**

Literature [survey](http://www.blurtit.com/q876299.html) is the most important step in software development process. Before developing the tool it is necessary to determine the time factor, economy in company strength. Once these things are satisfied, ten next steps are to determine which operating system and language can be used for developing the tool. Once the [programmers](http://www.blurtit.com/q876299.html) start building the tool the programmers need lot of external support. This support can be obtained from senior programmers, from [book](http://www.blurtit.com/q876299.html) or from websites. Before building the system the above consideration are taken into account for developing the proposed system.

**3.2 History of python**

Python was developed by Guido van Rossum in the late eighties and early nineties at

the National Research Institute for Mathematics and Computer Science in the Netherlands.

Python is derived from many other languages, including ABC, Modula-3, C, C++, Algol-68, SmallTalk, and Unix shell and other scripting languages.

Python is copyrighted. Like Perl, Python source code is now available under the GNU General Public License (GPL).

Python is now maintained by a core development team at the institute, although Guido van Rossum still holds a vital role in directing its progress.

First Public Release

Van rossum first released Python in 1991 for public to use.The Python language did not really can ground with the public till a forum was created to discuss the language in 1994.

In 1994

Version 1.0 was released in 1994 right when Python started to gain traction with some followers.one of the main focuses of this release was making the language easy to use

In 2000

Version 2.0 was released in 2000 giving the language the ability to garbage collect which is a form automatic memory management.

In 2001

Python formed a non-profit organization called Python Software Foundation and version 2.1 was released.

In 2008

Python 3 was released to the public.Python 3 was designed to reduse the multiple ways to do something and try to limit it to only one correct way to code.This this idea it has made python even easier to learn and write.

Python Features

Python's features include −

* **Easy-to-learn** − Python has few keywords, simple structure, and a clearly defined syntax. This allows the student to pick up the language quickly.
* **Easy-to-read** − Python code is more clearly defined and visible to the eyes.
* **Easy-to-maintain** − Python's source code is fairly easy-to-maintain.
* **A broad standard library** − Python's bulk of the library is very portable and cross-platform compatible on UNIX, Windows, and Macintosh.
* **Interactive Mode** − Python has support for an interactive mode which allows interactive testing and debugging of snippets of code.
* **Portable** − Python can run on a wide variety of hardware platforms and has the same interface on all platforms.
* **Extendable** − You can add low-level modules to the Python interpreter. These modules enable programmers to add to or customize their tools to be more efficient.
* **Databases** − Python provides interfaces to all major commercial databases.
* **GUI Programming** − Python supports GUI applications that can be created and ported to many system calls, libraries and windows systems, such as Windows MFC, Macintosh, and the X Window system of Unix.
* **Scalable** − Python provides a better structure and support for large programs than shell scripting.

Apart from the above-mentioned features, Python has a big list of good features, few are listed below −

* It supports functional and structured programming methods as well as OOP.
* It can be used as a scripting language or can be compiled to byte-code for building large applications.
* It provides very high-level dynamic data types and supports dynamic type checking.
* IT supports automatic garbage collection.
* It can be easily integrated with C, C++, COM, ActiveX, CORBA, and Java.