**Details of hardware & software used: Hardware Specification (Minimum):**

**Disc Space: 40 GB**

**PC Used: IBM Compatible**

**Processor: Pentium 3**

**Memory: 512 MB RAM**

**File System: 32 Bit**

**Software Specification (Minimum):**

**Operating System: Windows 10**

**End Language: PYTHON**

**Local Validation: PYTHON**

**Detailed Life cycle :**

**We have used Prototype Model as Software Engineering life Cycle Process. It is one of the most popularly used Software Development Life Cycle Models (SDLC). It offers a small scale facsimile of the end product and is used for obtaining customer feedback as described below:**

**Customer Feedback**

**Develop/Refine Prototype**

**is used to**

**Testing of Prototype by the Customer**

**results in used for**

**The above given diagram shows the whole working life cycle of prototype model as it totally based on customer.**

1. **Requirement Analysis :-**

**This process is also known as feasibility study. In this phase, the development team studied the site requirement. They investigate the need for possible dynamic representation of the site and increase security features. By the end of feasibility study, the team furnishes a document that holds the different specific recommendations for the candidate system. It also includes personnel assignments, costs, project schedules, target dates etc. the requirement gathering process is intensified and focused specially on software. The essential purpose of this phase is to find the need and to define the problem that needs to be solved. During this phase following facts were gathered.**

* **Determined the user need**
* **Identified the facts**
* **Establish the goals and objective for the proposed system**
* **Feasibility for the new system**

1. **Develop/Refine Prototype :-**

**According to the user’s need the prototype for a software is being developed. A single software consists of number of prototypes which is being developed when one prototype gets completed and is satisfies all the user’s need. This phase used for Testing phase done by the customer.**

1. **Testing :-**

**This is the whole cycling process of prototype model which satisfies all the needs of user and is fully based on user’s testing phase** **There are different testing methods involved. Software testing methods are traditionally divided into black box testing and white box testing. These two approaches are used to describe the point of view that a test engineer takes when designing test cases.**

* **Black box testing** **-** **Black box testing treats the software as a "black box," without any knowledge of internal implementation. Black box testing methods include: equivalence partitioning, boundary value analysis, all-pairs testing, fuzz testing, model-based testing, traceability matrix, exploratory testing and specification-based testing.**
* **White box testing -** **White box testing, by contrast to black box testing, is when the tester has access to the internal data structures and algorithms (and the code that implement these).White box testing methods can also be used to evaluate the completeness of a test suite that was created with black box testing methods. This allows the software team to examine parts of a system that are rarely tested and ensures that the most important function points have been tested.**
* **Grey Box Testing -** **Grey box testing involves having access to internal data structures and algorithms for purposes of designing the test cases, but testing at the user, or blackbox level. Manipulating input data and formatting output do not qualify as "grey box," because the input and output are clearly outside of the "black-box" that we are calling the system under test. Grey box testing may also include reverse engineering to determine, for instance, boundary values or error messages.**
* **Acceptance testing** **-** **Acceptance testing can mean one of two things: a) A smoke test is used as an acceptance test prior to introducing a build to the main testing process.**

**b) Acceptance testing performed by the customer is known as user acceptance testing (UAT).**

* **Regression Testing – Regression testing is any type of software testing that seeks to uncover software regressions. Such regression occurs whenever software functionality that was previously working correctly stops working as intended. Typically regressions occur as an unintended consequence of program changes. Common methods of regression testing include re-running previously run tests and checking whether previously fixed faults have re-emerged.**
* **Non Functional Software Testing – Special methods exist to test non-functional aspects of software.**

1. **Customer Feedback :-**

**The completion of a system will be achieved only after it has been thoroughly tested by the customer and its totally depends on customer’s Feedback. Though this gives a feel the prototype is completed, there cannot be any prototye without going through this stage. Hence in this stage it is decided whether this prototype can undergo the real time environment execution without any break downs, therefore a package can be rejected even at this stage.**

**Flowcharts –**

**Paint Editor**

**Open File**

**Edit File**

**Delete File**

**Load File**

**Create a New File**

**End**

**Whether Exit ?**

**Start**

# Erd and Dfd

# ER Diagram For Editor -

**Type Data**

**User**

1. **ER Diagram for Paint -**

**User**

**Draw**

1. **Data Flow Diagram for Editor –**

* **Level 0 :-**

**File**

**User Display**

**User**

**Operation Modified File**

* **Level 1 :-**

**File Operation**

**User Display**

**User**

**Modified File**

1. **Data Flow Diagram for Paint –**

* **Level 0 :-**

**File**

**User Display**

**User**

**Operation Modified File**

* **Level 1 :-**

**File Operation**

**User Display**

**User**

**Modified File**

**Future Enhancement**

**This project can be updated with more functions so that it can be used easily and more by the users. The updation that can take place in this project are as follows:**

1. **Adding functionality of Ms Word :-**

**We can also add all the functionality of ms word in one software so that users are able to use three different software in one software. By updating this facility users can conveniently perform three different tasks in single software.**

1. **Speech Recognition and Image :-**

**This functionality will help user to add image in their documents as preparing any form or working with resume. Speech Recognition will help users to work only by their voice without any click in the software. Whenever user is unable to write can speak and perform any task.**

1. **Colour Effect :-**

**By using this functionality users can work with colourful text in any boring editor. Students can Prepare their notes in the as they want.**

1. **Layout :-**

**The Designed layout may not be liked by users so I will try to update this layout differently and more attractively than other softwares .**

1. **User Requirement :-**

**If user found and need any type of requirement which is not being provided in the software so according to the user’s need will be updated so that all the users need can be fulfilled**

**Conclusion**

**This developed project is beneficial more for students as they can easily prepare their notes using my this project. This “Paint Editor” gives them the facility to add text using editor , to add image using paint as well as if they found any difficulty so they can get connected to Wikipedia directly and can search the topics they want.**

**This project is being prepared according to the user’s daily requirement mostly for School going or College going students.**

**If they found any requirement in the software they can comment us with their requirement and I will update it in our next version of project.**

**References**

* [**www.google.com**](http://www.google.com)
* [**www.youtube.com**](http://www.youtube.com)
* **Wikipedia**
* **Python Workshop**