|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Key Concepts** | **Explore concepts' significance and relevance** | **Establish relevance, make sense and meaning -Find real-life contexts** | **Establish relevance, make sense and meaning -Find interdisciplinary connections** | **Engage in critical thinking** | **Technology, tools and techniques** | **Plan**  **project management** | **Project specification and sketch** |
| Programming Testing is process of executing and verifying the product to check errors and bugs and then correcting it.  *Who should test?*  -Developer  - Test Engineer  -Testing Team  - Analyst  - Tester  Once coding is done, the expert or engineer experiences and tests the framework of the prerequisite item. | Programming testing is really required to know imperfections and blunders that were made in the middle of the improvement stages.  Its basic need is to ensure whether product  Meets customer’s requirement technically as well as in quality and fulfillment in the application.  It is important to guarantee the Quality of the product.  To get the client’s assurance, quality item must be conveyed. | A program that works properly for an individual in a given circumstance doesn’t mean will work for other individual in other circumstance.  For e.g.  If an admin wants to search for a doc and if it is unavailable in database then it can add the doc to the database and can do the search. But if a user wants to search for a doc and it is not available in database then it can’t find the doc.  Thus testing of different functions provided to the type of user must be tested. | For testing firstly unit testing then integration testing and lastly final testing with all final components.  Following are supporting interdisciplinary connection:  -user-server Configuration management  -Infrastructure as code  -Documentation  -Software Quality assurance  -User Experience | It may happen that the results may be overestimate.  At the point when directing trials, checking for bugs in the code and executing test automation scripts are done perfectly, the quality confirmation individuals feel like they are on 9th cloud.  It can also happen that all properties are not tested or reason for failure is not found. | Mostly, we are using python, JSP for our coding work.  One of the most popular testing tool for python is **Nose2,** using this we will test different part of our code.  Another popular testing tool is **JUnit.**  JUnit is a regression testing framework for implementing unit testing in Java by developers. It also increase quality of code and accelerate programming speed | Presently,  We are focusing on various testing tools and technologies.  Side by side we are also concentrating on *Blackbox* and *Whitebox* testing.  We will also try to do different tests to test each part of code.  Immediate backlogs are none, but further testing document will be completed. | After completing design and coding part. We started focusing on testing. |