**GIT AND GIT-HUB**

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|  | **Version Control:**   * Version control is the management of changes to the documents, computer programs, websites and other collection of information. * Changes are usually termed as versions. |

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|  | **Version Control Tools:**   * Git * Subversion * CVS * Mercurial |

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|  | **Git:**   * Git is a distributed version control tool that supports distributed workflows by providing data assurance for developing quality software. * Git is a version control tool that allows us to perform all the operations like fetching, updating etc.   **GitHub:**  GitHub acts as cental repository server that allows us to host the central repository in remote server. |

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|  | **Features of Git:**   * Allows distributes development of code * Compatible with existing systems and protocols * Supports non-linear development of software * Uses lossless compression technique to compress data on the client’s side * Fetching data from local repository is 100 times faster than remote repository * Modify the source code according to your needs * Lost data can be easily recovered from any of the local repositories * Git is very secure, it uses SHA1(algorithms) to name and identify objects |

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|  | **Repository:**   * A directory or storage space where your projects can live. * It can be local to a folder on your computer or it can be storage space on GitHub or any other online host.   **Types of Repositories:**   * Central Repository * Local Repository |

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|  | **Git status:**  Tells which files are added to index and are ready to commit**.**  **Git add:**  Lets you to add the files to the index.  **Git commit:**  Refers to recording snapshots of the repository at a given time |