Sprint 2 Retrospective

Team 16 - xpac

Amol Moses Jha, Adit Kumar, Anunai Ishan, Parth Shelgaonkar

• What went well?

‣ **User Story #1:**
As a user, I would like xpac to able to install composite packages.

#	Task Description
1	Integrate metadata classes with both the server and client.
2	Implement graph representation of packages on client-side.
3	Topologically sort the given subgraph.
4	Build dependency trees based on the result of topological sorting of the sub-graph.

‣ **Completed:** The client is able to logically represent and work with package entities, and is further able to install packages with multi-level dependencies.

‣ **User Story #4:**
As a user, I wish to be able to list all the packages that have been installed by xpac.

#	Task Description
1	Set up client to store and list all the packages available.

‣ **Completed:** The client is able to request the whole universe of packages, and is able to list all installed packages flawlessly.

‣ **User Story #5:**
As a user, I would like xpac to network with developers and provide a platform for users to submit valuable feedback and critiques about xpac.

#	Task Description
1	Set up an IRC server for the users to be able to connect to the developer community.
2	Link the feedback form where users can submit valuable feedback and bug reports to the website

‣ **Completed:** We have a IRC Server running, which runs well with a dummy client which we set up. This should serve for now, as we make our server configuration more robust in the future.

‣ **User Story #6:**
As a user, I would like xpac to be a stable and robust piece of software.

#	Task Description
1	Set up unit testing for server.
2	Set up unit testing for client.

‣ **Completed:** Unit testing and extensive testing was done on both the server and the client connection and installation, in order to make xpac as robust as possible.

• What did not go well?

‣ **User Story #2:**
As a user I would like xpac to utilize compression and decompression functionalities in order to efficiently manage my packages.

#	Task Description
1	Set up functions to compress and decompress metadata employing common compression algorithms.

‣ **Not completed:** We were unable to implement the logic or libraries for compression/decompression due to time constraints and insufficient implementation for the base class for metadata, as in our phase of education, we decided to implement these libraries from scratch, and thus, ended up spending inordinate amounts of time on this user story, without effectively implementing it.

‣ **User Story #3:**
As a user, I would like to ensure that the packages served by xpac are not corrupt or malicious.

#	Task Description
1	Implement checksum verification of files fetched, utilizing the MD5 algorithm on client-side.
2	Implement the hashing functionality for MD5 on server-side.

‣ **Not completed:**
Our research was spent on trying to get the root privilege as secure as possible for the client as possible. This made it difficult for us to set up integrity testing on both the server and the client side; but we will be sure to work on these in the next sprint.

• How should you improve?

We need to understand the fact that software reuse, in the form of reusing existing libraries and already implemented standard features needs to be an important way of pushing forward. This will help us cut down unnecessary time spent on implementing these features from scratch, which admittedly, sometimes ends up being too difficult a task for us to work with. Keeping this in mind, we plan to extensively read up on existing documentation for existing libraries and work with them in order to achieve maximum productivity for the next sprint. This should help us completely flesh out xpac as much as possible, and achieve our deliverables on time.