## **Weekly Assignment**

The weekly assignment starts from Monday morning to Friday night of the learning week. Its aim is to allow you to apply the concepts that you are going to learn in the coming few days and the knowledge you have learnt before to a project.

You are free and encouraged to work with other students to finish this weekly assignment as Xccelerate believes that peer-learning is the best approach of learning.

## **Dropbox with Cache**

We are going to create a Dropbox with cache application, which means to host a server to store data with one extra thing - Cache.

One of the purposes of using | Cache | is to speed up the loading of frequently accessed resources:

- 1. User A requests resource X from server.
- 2. Server serves resource X from local storage (slow I/O) and store it in cache.
- 3. User B, C, D request same resource X again from server.
- 4. Server serves resource X from cache instead of local storage.

We will work on this project over this week and always let you know which part to work on during which day.

## Requirements

By Monday the following week , you should submit this assignment to the exercise repository, the Dropbox with Cache should have the following functionalities. (The topic related to that functionality is enclosed by ().):

- Create a HTTP Server. ( express )
- Read file from local (fs with Promise)
- Handle HTTP Request.
  - Pass file content to server via GET/POST request
  - Save file content to server (fs with Promise)
- Handle HTTP Response.
  - Retrieve file content from server storage for the first request
  - Create middleware to cache (store) the response data. ( using array/ object )
  - Retrieve file content from cache afterward