

App Manager

A software company would like to develop a mobile application to showcase their client portfolio.

On the server side, at least, the following details should be maintained:

- Id - the internal client id. Integer value greater than zero.
- Name - the client name. A string of characters representing the client name.
- Type - the client type. Eg. "individual", "small", "medium", "big".
- Status - the client status. Eg. "prospect", "new", "confirmed",
- Employees - the number of employees. Eg. 40.
- CEO - the name of the chief executive officer. Eg. Steve Martin.

The application should provide at least the following features:

- Developer Section (separate activity - available offline)
 - a. (0.5p) View all the available clients. Using **GET /clients** call, the developer will receive the list of all the clients available in the system. The list will be persisted on the device. If offline the app will display the local persisted list and a way to retry the connection.
 - b. (0.5p) Edit client details. The name, status and the number of employees should be available to be updated using a **POST /update** call, by using a valid client id. If offline the information will be saved locally and once connected the app will synchronize the local information with the server.
 - c. (0.5p) Add more employees. Using **POST /employees** call with the client id the developer will be able to specify the new number of employees that the client should have. The server will respond with the client object with the total number of employees. If offline, the request will be queued and processed once online.
 - d. (0.5p) Remove the local persisted information.
 - e. (0.5p) Display the persisted information, collected while offline, in a list format. Both for /update and /employees calls.
 - f. (0.5p) When selecting a persisted offline entry, allow the user to update the entry.
 - g. (0.5p) Allow the user to remove the entries from the offline persisted list.
 - Manager Section (separate activity - available only online)
 - a. (0.5p) Using **POST /new** call by specifying a client name, type and the employee number, a new client will be added.
 - b. (1p) Remove a client. Using **DELETE /client** by specifying the client id.
 - c. (1p) List the prospect clients descending by the number of employees. Using the **GET /prospects** call.
- (1p) On **all** network operations a progress indicator will be displayed.
- (1p) On **all** network interactions, if an error message is received, the app should display the error message using a toast or snackbar.
- (1p) On **all** interactions (network or db), a log message should be recorded.

Note: You need to implement **both** the requested mobile application and the REST server to support the above requirements.