## BeneQuest API

## High level Objects:

- 1. Deed
  - a. deedID
  - b. description
  - c. image
  - d. lat
  - e. long
  - f. timestamp
  - g. upvotes
  - h. status
- 2. User
  - a. userID (identifier)
  - b. emoji
  - c. upvotes
- /addRequest/
  - Description: Add a new request
  - o POST request
    - userID
    - description
    - lat
    - long
    - image
  - Response
    - deedID [integer]
- /addDeed/
  - o Description: add a completed request (deed) that a user has finished
  - o POST Request
    - userID
    - deedID
    - image
- /addUser/
  - o Description: add a new user, sets emoji to default
  - POST Request
    - userID
- /upvote/
  - Description: Update the upvote for a specific deed
  - UPDATE request
    - userID
    - deedID

- /updateUser/
  - o Description: Update the emoji for the user
  - UPDATE Request:
    - userID
    - emoji
- /requestsNear/
  - Description: Get incomplete requests that are near me
  - POST request
    - lat
    - long
  - Response
    - numOfRequests
    - deeds[]
- /allRequestsNear/
  - o Description: Get all deeds that are near me, both complete and not
  - POST Request
  - Response
    - numOfRequests
    - deeds[]
- /weeklyHeros/
  - Description: Get the leaderboard of top users
  - POST request
  - Response
    - numOfHeros
    - users[]
- /:userID/upvotes
  - POST Request
  - Response
    - numOfUpvotes
    - deeds[]
- /:userID/doneDeeds/
  - Description: Get the deeds that were done by specific UserID
  - POST Request
  - Response
    - numOfDeeds
    - deeds[]

## **Database Tables**

```
Deeds(<u>deedID</u>, latitude, longitude, timestamp, requesterID, img, upvotes, status)
Upvote(<u>userID</u>, <u>deedID</u>)
Done(<u>userID</u>, <u>deedID</u>, img)
Users(<u>userID</u>, emoji)
```

```
SELECT sum(exp) AS exp, userID, emoji FROM (
   SELECT *, (100 + 10* upvotes) AS exp
   FROM Deeds
   NATURAL JOIN Done
   NATURAL JOIN Users
) GROUP BY userID
ORDER BY exp
LIMIT 10;
SELECT sum(100 + 10 * upvotes) AS exp, userID, emoji
   FROM Users
   NATURAL JOIN Done
   NATURAL JOIN Deeds;
SELECT * FROM Deeds
LEFT OUTER JOIN (
   SELECT 1 AS upvoted, deedID FROM (
       SELECT * FROM Upvotes
       WHERE userID = ''
NATURAL JOIN Done
NATURAL JOIN Users;
```