CS 442: Mobile Applications Development

Assignment 4 – Inspiration Rewards *(400 pts)*

Uses: Multi-Activity, Location Services, Geocoding, Internet, APIs, Images, Camera, Gallery

A) App Highlights:

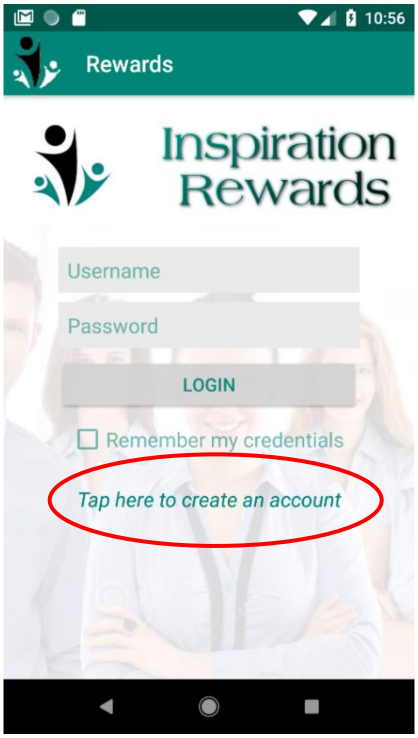
- This app allows users within a company or organization to award each other “reward points” (and comments) as a thank you or a commendation for their performance on a task.
- Users can create a profile for themselves and interact with the other users. Users can later edit/update their profile data
- Users start with a fixed amount of points that they can award to other users.
- When a user awards points to another, the point value is deducted from the point total available to give to others. Once a user is out of points to give, they can no longer add new rewards until their points are renewed. Point renewal is not within the scope of this project.
- Assume the process of resetting the points-to-award value (and the actual act of rewarding the employee) are out of scope for this project.
- You will need to create classes to represent the user profiles and the reward assignments.
- We will be using an Amazon Web Services (AWS) based API to as the “back end” which holds user and reward data.

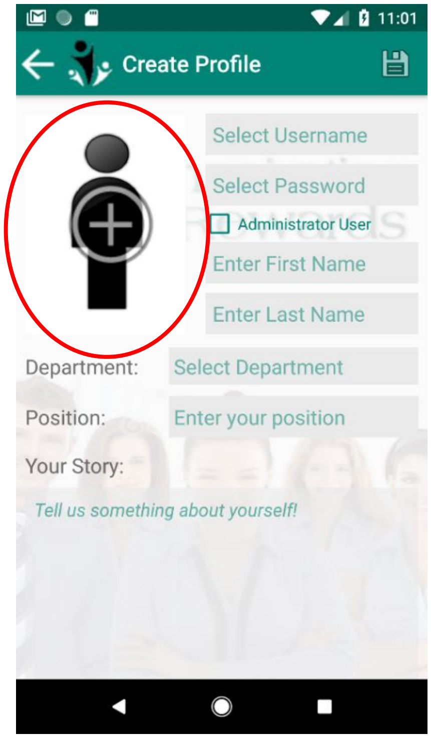
B) Behavior Use Cases and Activities: *Activity/behavior diagrams follow (in section C)*

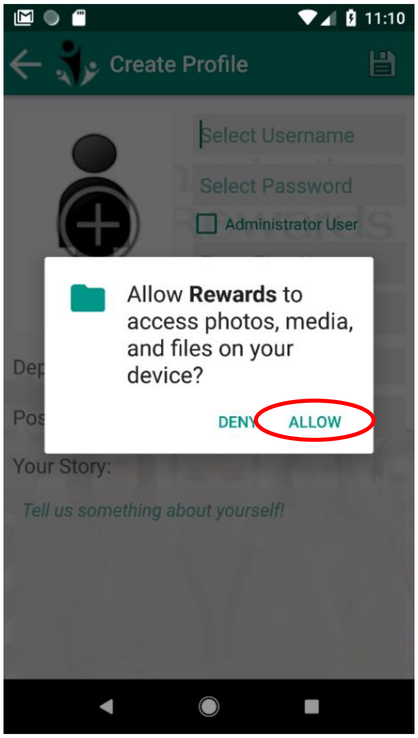
- Users can create a new profile (via the Create Profile Activity) with data including a username, password, first & last name, administrator flag, department, position, a short self-summary, and a photo. Successful account creation logs in the user and displays the Profile Activity. The Create Profile Activity is displayed by clicking a link on the Login Activity. See diagram “a” in the next section.
- Users login (via the Login Activity) by providing their username and password. A checkbox can be checked to save the credentials so that they are auto-populated whenever the app is started. See diagram “b” in the next section. Upon login, the User Profile Activity is displayed.
- The data displayed in the Profile Activity includes first & last name, username, location, awarded point total, department, position, points available to award, a short self-summary, a photo, and a list of awarded points. See diagram “b” in the next section.
- From the User Profile Activity, the user can open the Edit Profile Activity via Options Menu. The Edit Profile Activity allows the user to edit the password, administrator flag, first & last name, department, position, the short self-summary, and the photo (username cannot be changed). See diagram “c” in the next section.
- From the User Profile Activity, the user can open the Leaderboard Activity (showing all other users, sorted by awarded point total) via Options Menu. From the Leaderboard Activity, an individual user can be selected and then displayed in the Award Activity. From there, rewards points (and a comment) can be awarded to the selected user. See diagram “d” in the next section.

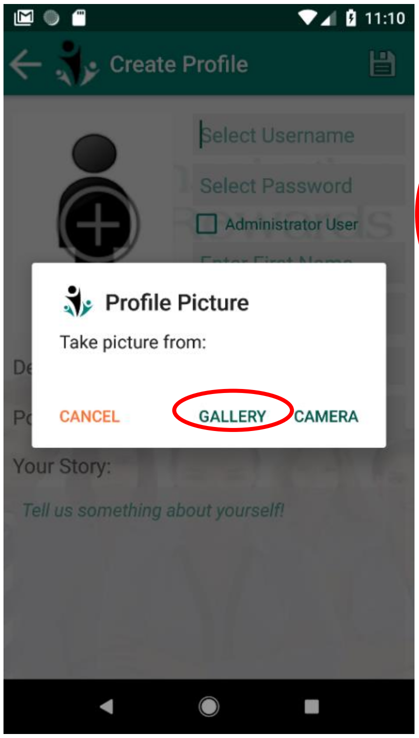
C) Application Behavior Diagrams:

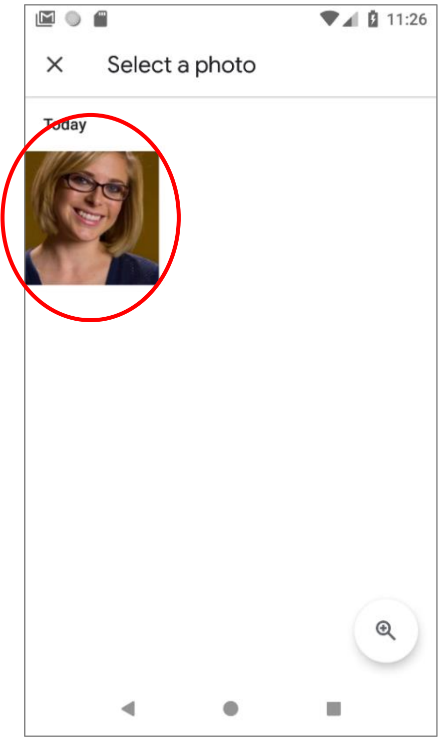
a. Create Profile *(Note, the first time the app runs, it should ask for file and location permissions):*

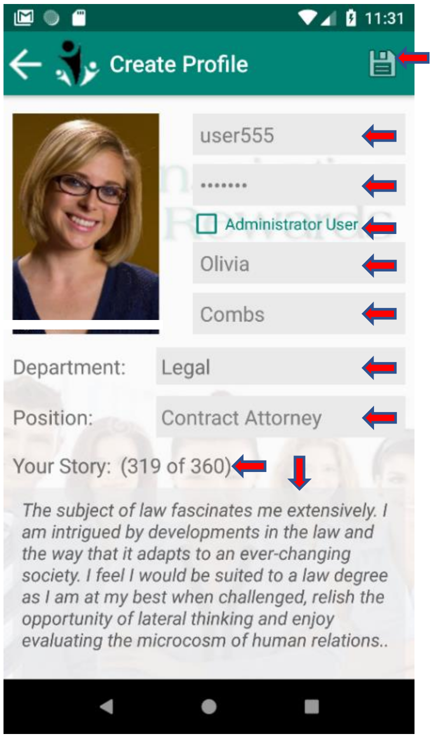





11:10
Create Profile
Select Username
Select Password
□ Administrator User
Allow **Rewards** to access photos, media, and files on your device?
DENY
ALLOW
Your Story:
Tell us something about yourself!







user555

•••••••

□ Administrator User

Olivia

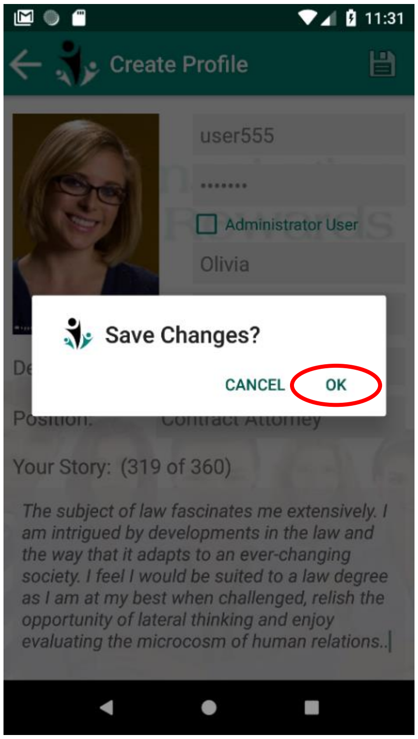
Combs

Department: Legal

Position: Contract Attorney

Your Story: (319 of 360)

The subject of law fascinates me extensively. I am intrigued by developments in the law and the way that it adapts to an ever-changing society. I feel I would be suited to a law degree as I am at my best when challenged, relish the opportunity of lateral thinking and enjoy evaluating the microcosm of human relations..



11:31

Create Profile

user555

·······

□ Administrator User

Olivia

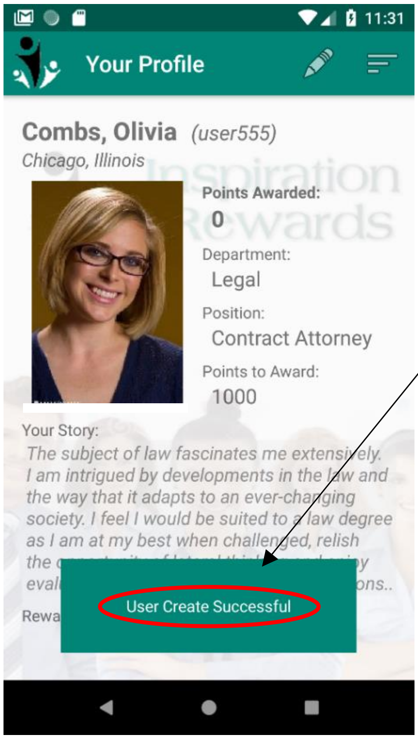
Save Changes?

CANCEL OK

Position: Contract Attorney

Your Story: (319 of 360)

The subject of law fascinates me extensively. I am intrigued by developments in the law and the way that it adapts to an ever-changing society. I feel I would be suited to a law degree as I am at my best when challenged, relish the opportunity of lateral thinking and enjoy evaluating the microcosm of human relations..



11:31

Your Profile

Combs, Olivia *(user555)*

Chicago, Illinois

Points Awarded:
0

Department:
Legal

Position:
Contract Attorney

Points to Award:
1000

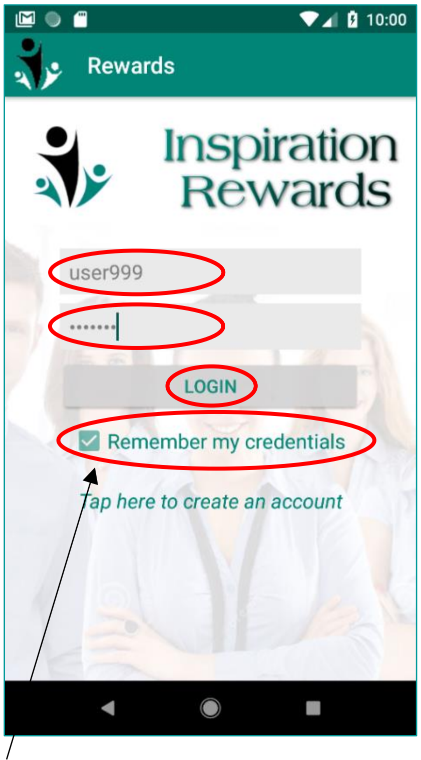
Your Story:

The subject of law fascinates me extensively. I am intrigued by developments in the law and the way that it adapts to an ever-changing society. I feel I would be suited to a law degree as I am at my best when challenged, relish

User Create Successful

This is a custom Toast

b. User Login *(Note, the first time the app runs, it will ask for file & location permissions):*



10:00

Rewards

Inspiration Rewards

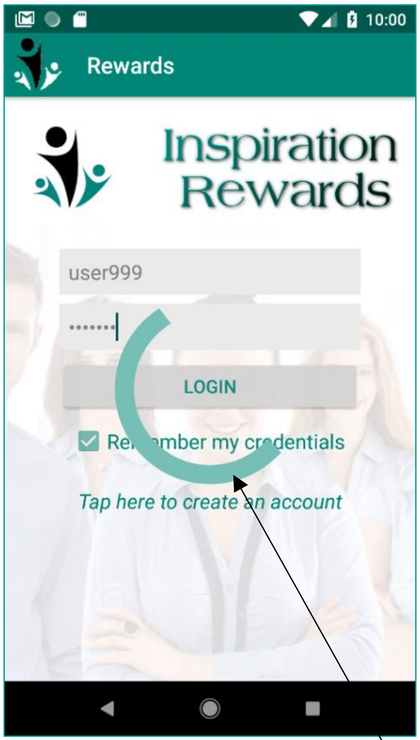
user999

·······

LOGIN

☑ Remember my credentials

Tap here to create an account



10:00

Rewards

Inspiration Rewards

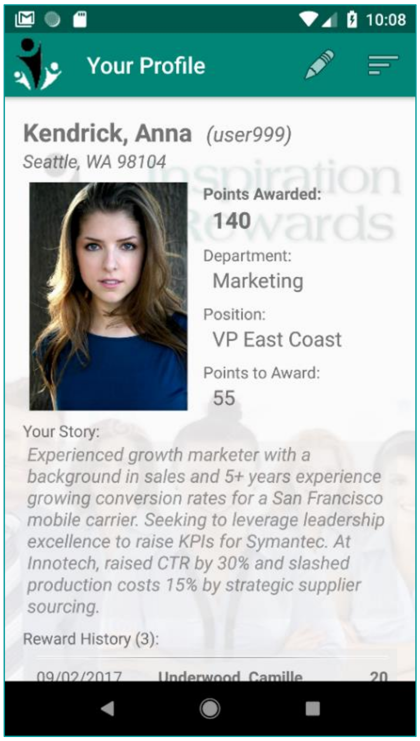
user999

·······

LOGIN

☑ Remember my credentials

Tap here to create an account



10:08

Your Profile

Kendrick, Anna *(user999)*

Seattle, WA 98104

Points Awarded:
140

Department:
Marketing

Position:
VP East Coast

Points to Award:
55

Your Story:

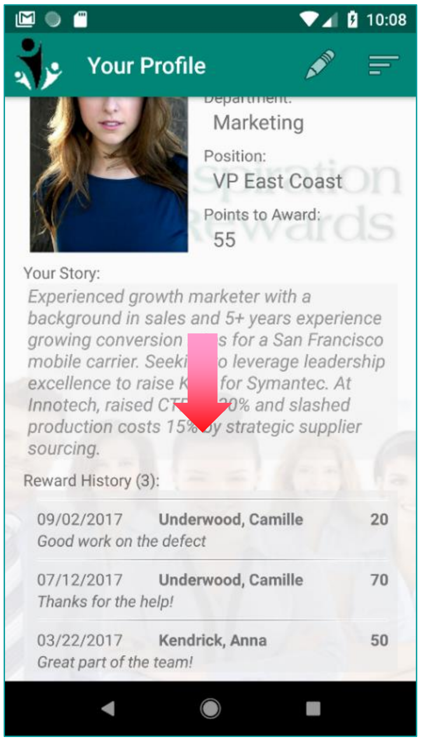
Experienced growth marketer with a background in sales and 5+ years experience growing conversion rates for a San Francisco mobile carrier. Seeking to leverage leadership excellence to raise KPIs for Symantec. At Innotech, raised CTR by 30% and slashed production costs 15% by strategic supplier sourcing.

Reward History (3):

09/02/2017 Underwood, Camille 20

Use SharedPreferences to save this choice, and the user name and password values when checked.

This is an indeterminate ProgressBar



Department:
Marketing
Position:
VP East Coast
Points to Award:
55

Your Story:

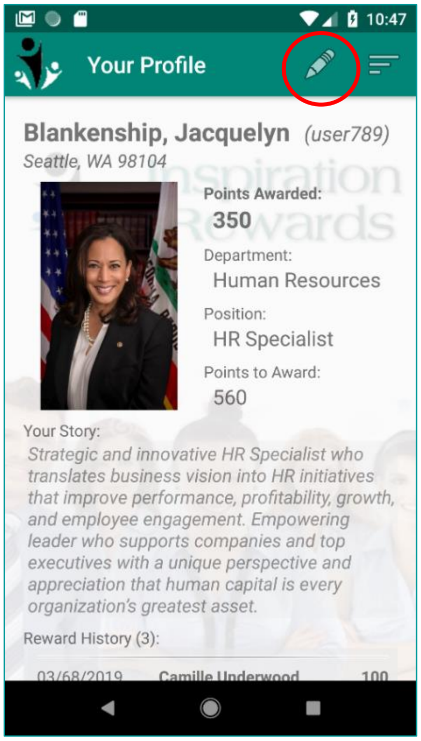
Experienced growth marketer with a background in sales and 5+ years experience growing conversion s for a San Francisco mobile carrier. Seeki o leverage leadership excellence to raise K for Symantec. At Innotech, raised CT 0% and slashed production costs 15% by strategic supplier sourcing.

Reward History (3):

09/02/2017	**Underwood, Camille**	**20**
Good work on the defect		
07/12/2017	**Underwood, Camille**	**70**
Thanks for the help!		
03/22/2017	**Kendrick, Anna**	**50**
Great part of the team!		

This whole Activity is scrollable

c. Edit Profile



Blankenship, Jacquelyn *(user789)*
Seattle, WA 98104

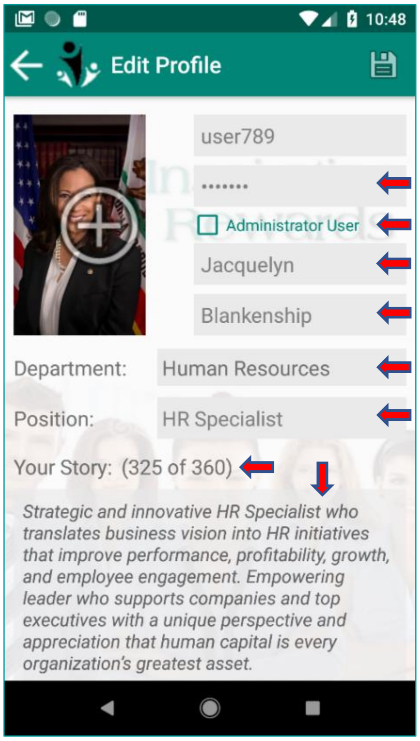
Points Awarded:
350
Department:
Human Resources
Position:
HR Specialist
Points to Award:
560

Your Story:

Strategic and innovative HR Specialist who translates business vision into HR initiatives that improve performance, profitability, growth, and employee engagement. Empowering leader who supports companies and top executives with a unique perspective and appreciation that human capital is every organization's greatest asset.

Reward History (3):

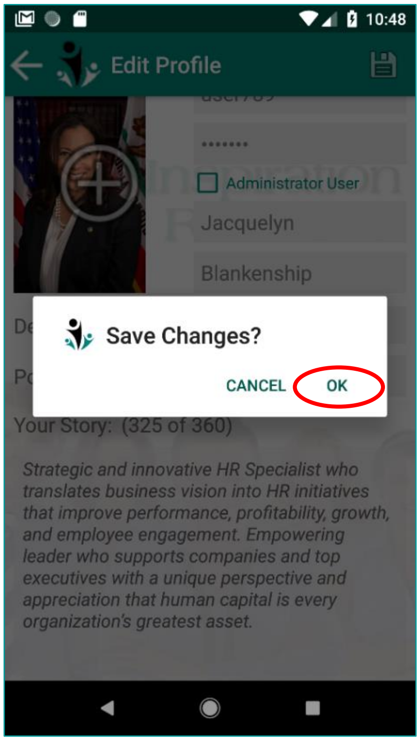
03/68/2019 **Camille Underwood** **100**



user789
•••••••
□ Administrator User
Jacquelyn
Blankenship

Department: Human Resources
Position: HR Specialist
Your Story: (325 of 360)

Strategic and innovative HR Specialist who translates business vision into HR initiatives that improve performance, profitability, growth, and employee engagement. Empowering leader who supports companies and top executives with a unique perspective and appreciation that human capital is every organization's greatest asset.

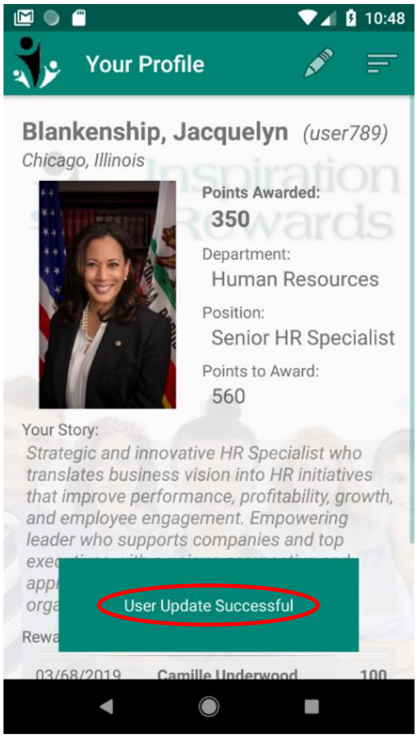


•••••••
□ Administrator User
Jacquelyn
Blankenship

Save Changes?

Your Story: (325 of 360)

Strategic and innovative HR Specialist who translates business vision into HR initiatives that improve performance, profitability, growth, and employee engagement. Empowering leader who supports companies and top executives with a unique perspective and appreciation that human capital is every organization's greatest asset.



Your Profile

Blankenship, Jacquelyn *(user789)*

Chicago, Illinois

Points Awarded:
350

Department:
Human Resources

Position:
Senior HR Specialist

Points to Award:
560

Your Story:

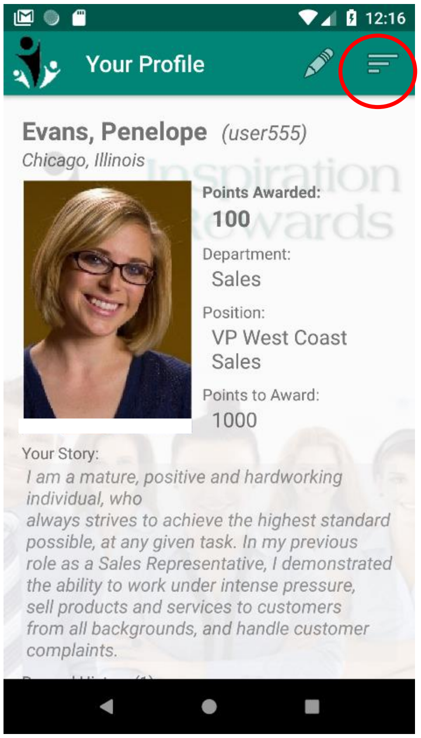
Strategic and innovative HR Specialist who translates business vision into HR initiatives that improve performance, profitability, growth, and employee engagement. Empowering leader who supports companies and top exec… app… orga…

Rewa…

User Update Successful

03/68/2019 Camille Underwood 100

d. Add Rewards



Your Profile

Evans, Penelope *(user555)*

Chicago, Illinois

Points Awarded:
100

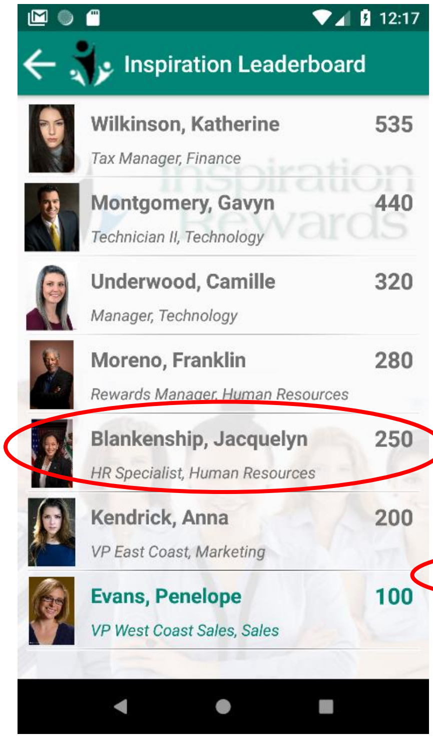
Department:
Sales

Position:
VP West Coast Sales

Points to Award:
1000

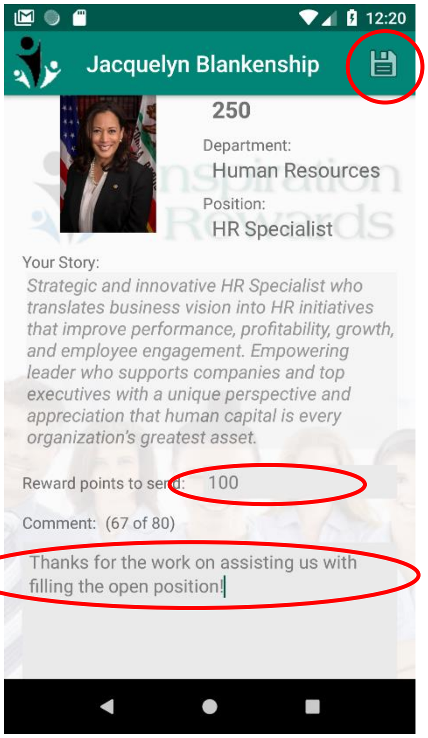
Your Story:

I am a mature, positive and hardworking individual, who always strives to achieve the highest standard possible, at any given task. In my previous role as a Sales Representative, I demonstrated the ability to work under intense pressure, sell products and services to customers from all backgrounds, and handle customer complaints.



Inspiration Leaderboard

Wilkinson, Katherine *Tax Manager, Finance*	535	
Montgomery, Gavyn *Technician II, Technology*	440	
Underwood, Camille *Manager, Technology*	320	
Moreno, Franklin *Rewards Manager, Human Resources*	280	
Blankenship, Jacquelyn *HR Specialist, Human Resources*	250	
Kendrick, Anna *VP East Coast, Marketing*	200	
Evans, Penelope *VP West Coast Sales, Sales*	100	



Jacquelyn Blankenship

250

Department:
Human Resources

Position:
HR Specialist

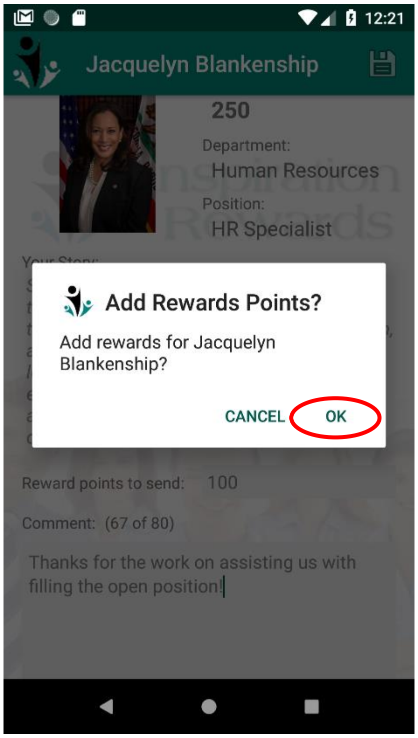
Your Story:

Strategic and innovative HR Specialist who translates business vision into HR initiatives that improve performance, profitability, growth, and employee engagement. Empowering leader who supports companies and top executives with a unique perspective and appreciation that human capital is every organization's greatest asset.

Reward points to send: 100

Comment: (67 of 80)

Thanks for the work on assisting us with filling the open position!



12:21

Jacquelyn Blankenship

250

Department:
Human Resources

Position:
HR Specialist

Your Story:

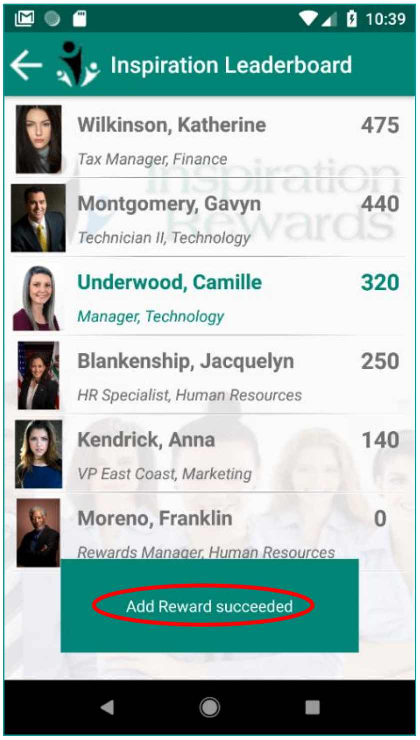
Add Rewards Points?

Add rewards for Jacquelyn Blankenship?

Reward points to send: 100

Comment: (67 of 80)

Thanks for the work on assisting us with filling the open position!

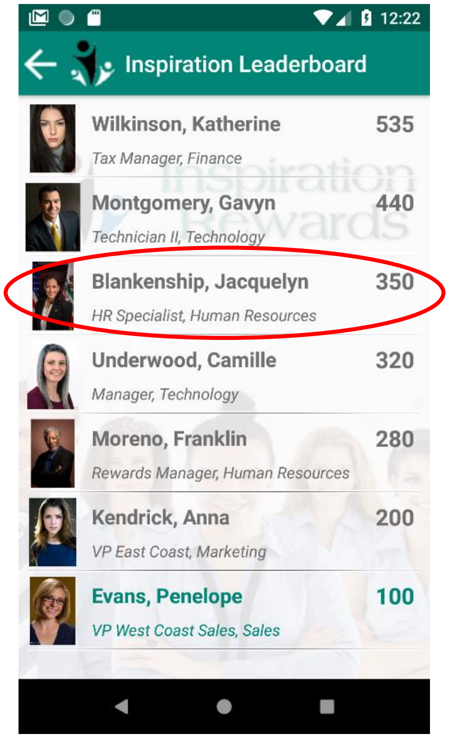


10:39

Inspiration Leaderboard

Wilkinson, Katherine Tax Manager, Finance	475
Montgomery, Gavyn Technician II, Technology	440
Underwood, Camille Manager, Technology	320
Blankenship, Jacquelyn HR Specialist, Human Resources	250
Kendrick, Anna VP East Coast, Marketing	140
Moreno, Franklin Rewards Manager, Human Resources	0

Add Reward succeeded



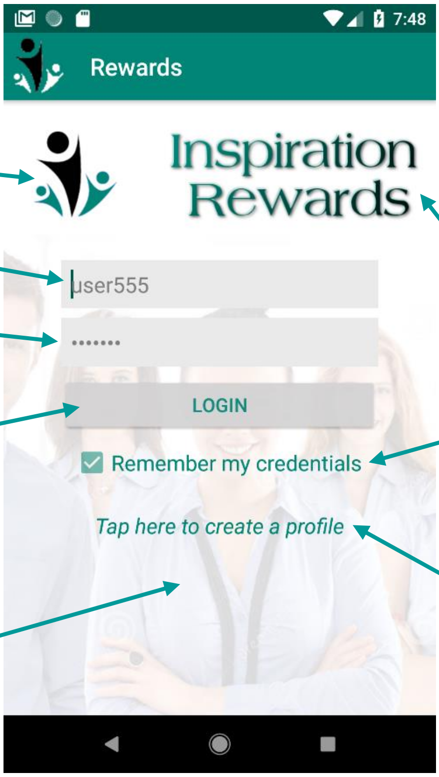
12:22

Inspiration Leaderboard

Wilkinson, Katherine Tax Manager, Finance	535
Montgomery, Gavyn Technician II, Technology	440
Blankenship, Jacquelyn HR Specialist, Human Resources	350
Underwood, Camille Manager, Technology	320
Moreno, Franklin Rewards Manager, Human Resources	280
Kendrick, Anna VP East Coast, Marketing	200
Evans, Penelope VP West Coast Sales, Sales	100

D) Activity Details

a. Login Activity



7:48

Rewards

user555

•••••••

☑ Remember my credentials

Tap here to create a profile

ActionBar Icon

Image

Username field

Password field

Login button – logs in user & opens Profile Activity

Semi-transparent background image

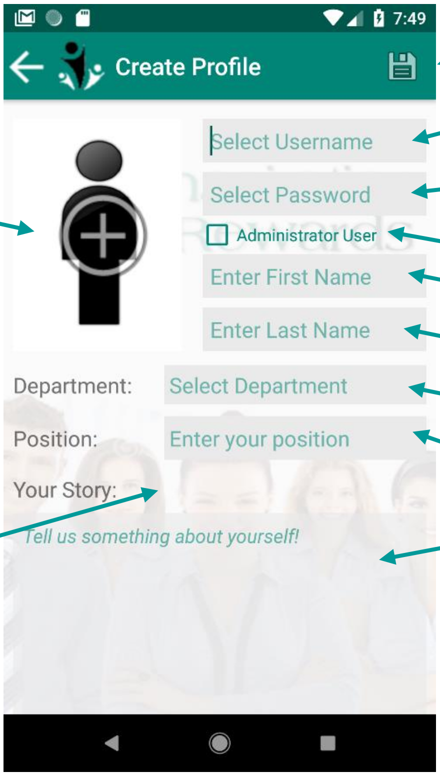
NOTE: The user's location (City & State) should be determined when this activity starts.

Image

Remember Credentials checkbox – uses SharedPreferences to remember last used username & password

TextView with onClick – opens the Create Profile Activity

b. **Create Profile Activity**



Select Username

Select Password

□ Administrator User

Enter First Name

Enter Last Name

Department: Select Department

Position: Enter your position

Your Story:

Tell us something about yourself!

ActionBar Icon with Arrow

User photo ImageView

Semi-transparent background image

Save Profile Menu Item

Username field

Password field

Make Admin user checkbox

First Name field

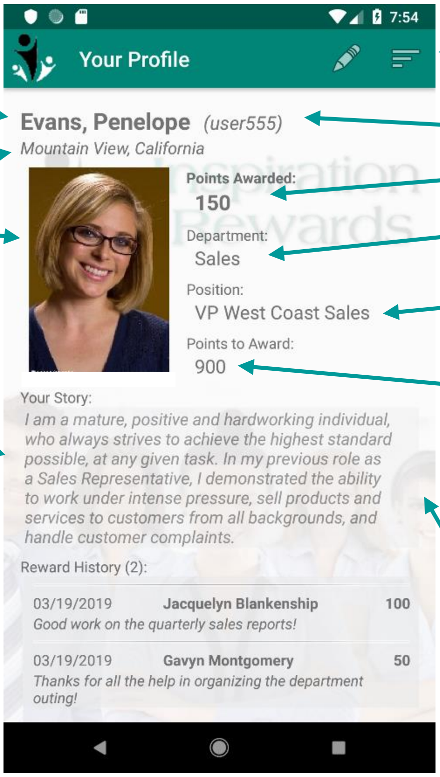
Last Name field

Department field

Position field

Personal story field

c. **Profile Activity**



Evans, Penelope *(user555)*

Mountain View, California

Points Awarded:
150

Department:
Sales

Position:
VP West Coast Sales

Points to Award:
900

Your Story:

I am a mature, positive and hardworking individual, who always strives to achieve the highest standard possible, at any given task. In my previous role as a Sales Representative, I demonstrated the ability to work under intense pressure, sell products and services to customers from all backgrounds, and handle customer complaints.

Reward History (2):

03/19/2019	**Jacquelyn Blankenship**	100
Good work on the quarterly sales reports!		
03/19/2019	**Gavyn Montgomery**	50
Thanks for all the help in organizing the department outing!		

ActionBar Icon

Last, First Name

Location: City, State

Photo ImageView

Personal Story

Data in this Activity is Read-Only

List of awards received

Edit and Leaderboard Menu Items

Username

Total points received

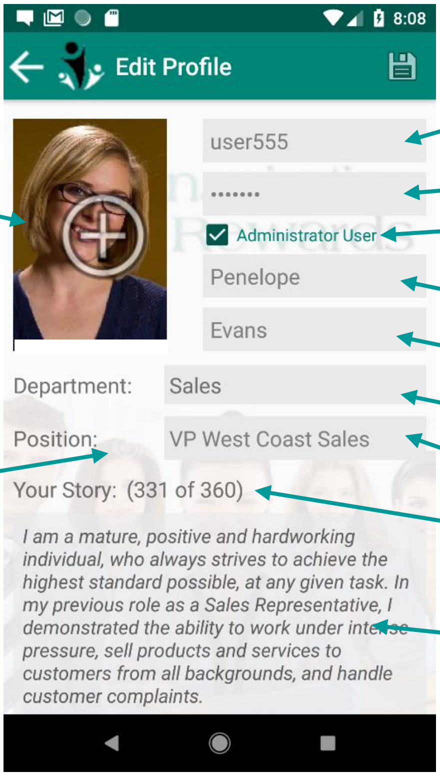
Department

Position

Points available to give as a reward

Semi-transparent background image

d. **Edit Profile Activity**



8:08

Edit Profile

user555

•••••••

☑ Administrator User

Penelope

Evans

Department: Sales

Position: VP West Coast Sales

Your Story: (331 of 360)

I am a mature, positive and hardworking individual, who always strives to achieve the highest standard possible, at any given task. In my previous role as a Sales Representative, I demonstrated the ability to work under intense pressure, sell products and services to customers from all backgrounds, and handle customer complaints.

ActionBar Icon with Arrow

User photo ImageView

Semi-transparent background image

Save Profile Menu Item

Username field (not editable)

Password field

Make Admin user checkbox

First Name field

Last Name field

Department field

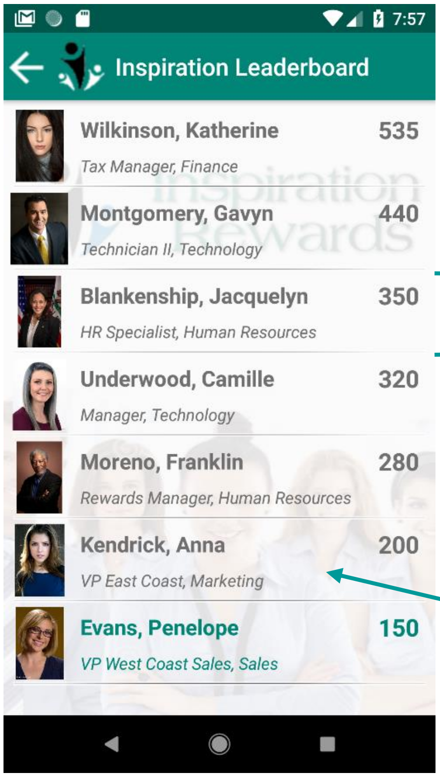
Position field

Available character count

Personal story field

All data in this Activity is can be changed except the Username

e. **Leaderboard Activity**



7:57

Inspiration Leaderboard

Wilkinson, Katherine *Tax Manager, Finance*	535
Montgomery, Gavyn *Technician II, Technology*	440
Blankenship, Jacquelyn *HR Specialist, Human Resources*	350
Underwood, Camille *Manager, Technology*	320
Moreno, Franklin *Rewards Manager, Human Resources*	280
Kendrick, Anna *VP East Coast, Marketing*	200
Evans, Penelope *VP West Coast Sales, Sales*	150

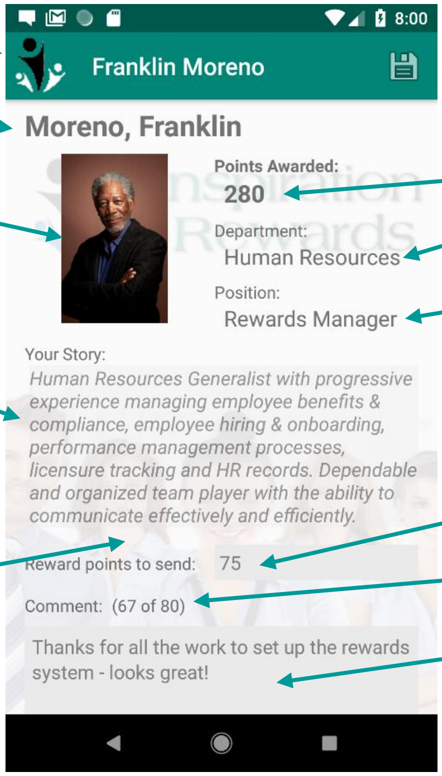
ActionBar Icon with Arrow

List of users, sorted by total awards points they have received

Each user records contains: Last, First Name Position, Department and Points

Semi-transparent background image

f. **Award Activity**



8:00

Franklin Moreno

Moreno, Franklin

Points Awarded:
280

Department:
Human Resources

Position:
Rewards Manager

Your Story:

Human Resources Generalist with progressive experience managing employee benefits & compliance, employee hiring & onboarding, performance management processes, licensure tracking and HR records. Dependable and organized team player with the ability to communicate effectively and efficiently.

Reward points to send: 75

Comment: (67 of 80)

Thanks for all the work to set up the rewards system - looks great!

ActionBar Icon

Save Profile Menu Item

Last, First Name

User photo ImageView

Total points received

Department

Position

Personal Story

Points to award to this user (editable)

Semi-transparent background image

Available character count

Comment to go along with this award (editable)

Only the "Reward points to send" and "Comment" fields are editable in this Activity.

E) Inspiration Rewards API

Data can be created, read, updated, etc. via the Inspiration Rewards API. The root endpoint for the Inspiration Rewards API is:

Base URL = http://inspirationrewardsapi-env.6mmagpm2pv.us-east-2.elasticbeanstalk.com

Note: The API calls detailed below require you to provide your student ID number as a part of the data the API required.

You MUST you your own student ID number!

The API:

1) **Create User Profile**:
Base URL + “/profiles”

Connection:

```
Request Method:  POST
Request Property: “Content-Type”: “application/json; charset=UTF-8”
Request Property: "Accept", "application/json"
```

JSON to Send (example):

```
{
        "studentId": "123456789",
        "username": "user888",
        "password": "pass888",
        "firstName": "Roman",
        "lastName": "Walters",
        "pointsToAward": 1000,
        "department": "Finance",
        "story": "Chartered Financial Auditor with 5+ years’ experience,
                 seeking to leverage proven cost, revenue, and budget
                 maximization skills for Capital One. Saved HUDA Inc. $2.7
                 million by identifying low-margin projects. Improved pricing
                 scheme at MRI International. Grew customer retention 32%.",
        "position": "Sr. Auditor",
        "admin": false,
        "location": "Mountain View, California",  ← From Location Services
        "imageBytes": "\/9j\/4AAQSkZJB………K/DCF\/\/2=\n",  ← A very long String
        "rewardRecords": []  ← A empty JSONArray (no rewards yet!)
}
```

Returns (Profile as JSON):

HttpURLConnection.HTTP_OK:

```
{
        "studentId": "123456789",
        "firstName": "Roman",
        "lastName": "Walters",
        "username": "user888",
        "department": "Finance",
        "story": "Chartered Financial Auditor with 5+ years’ experience,
                 seeking to leverage proven cost, revenue, and budget
                 maximization skills for Capital One. Saved HUDA Inc. $2.7
```

```
                    million by identifying low-margin projects. Improved pricing
                    scheme at MRI International. Grew customer retention 32%.",
          "position": "Sr. Auditor",
          "password": "pass888",
          "oldPassword": null,  ← This field is not used in this call/return
          "pointsToAward": 1000,
          "admin": false,
          "imageBytes": "\/9j\/4AAQSkZJB………K/DCF\/\/2=\n",  ← A very long String
          "location": "Mountain View, California",
          "rewards": null   ← Since this is a new user, no rewards yet!
    }
```

Error: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection.HTTP_FORBIDDEN , etc)

```
    {
          "errordetails": {
             "timestamp": "10-13-2019 06:27:43",
             "status": "BAD_REQUEST",  ← This varies by error type, not needed
             "message": "Invalid input - a profile with this username already
                         exists.",  ← Use this field as a message to user
             "subErrors": []  ← Not used for this call/response
          }
    }
```

2) **Login**:

Base URL + “/login”

Connection:

Request Method: POST
Request Property: “Content-Type”: “application/json; charset=UTF-8”
Request Property: "Accept", "application/json"

JSON to Send:

```
      {
            "studentId": Student ID Number,
            "username": User Name,
            "password": Password
      }
```

Example:

```
      {
            "studentId": "123456789",
            "username": "user555",
            "password": "pass555"
      }
```

Returns (Profile as JSON):

HttpURLConnection.HTTP_OK:

```
{
   "studentId": "123456789",
   "firstName": "Olivia",
   "lastName": "Combs",
   "username": "user555",
   "department": "Legal",
   "story": "The subject of law fascinates me extensively. I am intrigued
                by developments in the law and the way that it adapts to an
                ever-changing society.",
   "position": "Contract Attorney ",
   "password": "pass555",
   "oldPassword": null, ← This field is not used in this call/return
   "pointsToAward": 1000,
   "admin": false,
   "imageBytes": "\/9j\/4AAQSkZJB………K/DCF\/\/2=\n", ← A very long String
   "location": "Chicago, Illinois",
   "rewards": [{ ← A JSONArray of JSONObjects
         "studentId": "123456789",
         "username": "user789",
         "name": "Kendrick, Anna",
         "date": "03/22/2017",
         "notes": "Great part of the team!",
         "value": 150
         }, {
         "studentId": "123456789",
         "username": "user789",
         "name": "Wilkinson, Katherine",
         "date": "01/11/2017",
         "notes": "Thanks for the late hours",
         "value": 100
         }]
}
```

Other: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection.HTTP_UNAUTHORIZED , etc)

```
{
    "errordetails": {
          "timestamp": "10-03-2019 06:38:25",
          "status": "UNAUTHORIZED", ← This can vary by error type
          "message": "Invalid username/password combination.",  ← Use as a
          "subErrors": []  ← Not used for this call/response     message to user
    }
}
```

3) **Update User Profile**:

Base URL + "/profiles"

Connection:

Request Method: PUT
Request Property: "Content-Type": "application/json; charset=UTF-8"
Request Property: "Accept", "application/json"

JSON to Send: Profile as JSON

```
{
      "studentId": "123456789",
      "username": "user555",
      "password": "pass555",
      "firstName": "Penelope",
      "lastName": "Evans",
      "pointsToAward": 825,
      "department": "Sales",
      "story": "I am a mature, positive and hardworking individual, who
                always strives to achieve the highest standard possible, at
                any given task. In my previous role as a Sales
                Representative, I demonstrated the ability to work under
                intense pressure, sell products and services to customers
                from all backgrounds, and handle customer complaints.",
      "position": "VP West Coast Sales",
      "admin": true,
      "location": "Mountain View, California",  ← From Location Services
      "imageBytes": "\/9j\/4AAQSkZJB………K/DCF\/\/2=\n",  ← A very long String
      "rewardRecords": [{  ← A JSONArray of JSONObjects
            "name": "Jacquelyn Blankenship",
            "date": "03\/19\/2019",
            "notes": "Good work on the quarterly sales reports!",
            "value": 100
            }, {
            "name": "Gavyn Montgomery",
            "date": "03\/19\/2019",
            "notes": "Thanks for all the help in organizing the outing!",
            "value": 50
      }]
}
```

Returns:

HttpURLConnection.HTTP_OK:

```
Profile Updated Successfully  ← This is text, not JSON
```

Other: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection.UNAUTHORIZED, etc)

```
{
   "errordetails": {
      "timestamp": "10-03-2019 06:38:25",
      "status": "UNAUTHORIZED",  ← This can vary by error type
      "message": "Invalid username/password combination.",  ← Use as a
      "subErrors": []  ← Not used for this call/response       message to user
   }
}
```

4) **Get All Profiles**:

Base URL + "/allprofiles"

Connection:

Request Method: POST
Request Property: "Content-Type": "application/json; charset=UTF-8"
Request Property: "Accept", "application/json"

JSON to Send:

```
{
        "studentId": Student ID Number,
        "username": User Name,
        "password": Password
}
```

Example:

```
{
        "studentId": "123456789",
        "username": "user555",
        "password": "pass555"
}
```

Returns:

HttpURLConnection.HTTP_OK:

```
[{  ← A JSONArray of JSONObjects
      "studentId": "123456789",
      "firstName": "Katherine",
      "lastName": "Wilkinson",
      "username": "user000",
      "department": "Finance",
      "story": "Chartered Financial Analyst with 5+ years' experience,
                seeking to leverage proven cost, revenue, and budget
                maximization skills for Capital One. Saved HUDA Inc. $2.7
                million by identifying low-margin projects. Improved pricing
                scheme at MRI International. Grew customer retention 32%.",
      "position": "Tax Manager",
      "password": null,  ← Not used for this call/response
      "oldPassword": null,  ← Not used for this call/response
      "pointsToAward": 160,
      "admin": false,
      "imageBytes": "\/9j\/4AAQSkZJB………K/DCF\/\/2=\n",  ← A very long String
      "location": "Hollywood, CA 90210",
      "rewards": [{  ← A JSONArray of JSONObjects
            "studentId": "123456789",
            "username": "user000",
            "name": "Kendrick, Anna",
            "date": "03/22/2017",
            "notes": "Great part of the team!",
            "value": 150
            }, {
            "studentId": "123456789",
            "username": "user000",
            "name": "Kendrick, Anna",
            "date": "01/22/2017",
            "notes": "Good work!",
            "value": 75
      }]
},
{
      "studentId": "123456789",
      "firstName": "Penelope",
      "lastName": "Evans",
      "username": "user002",
      "department": "Sales",
      "story": "I am a mature, positive and hardworking individual, who
                always strives to achieve the highest standard possible, at
                any given task. In my previous role as a Sales
                Representative, I demonstrated the ability to work under
                intense pressure, sell products and services to customers
                from all backgrounds, and handle customer complaints.",
      "position": "VP West Coast Sales",
      "password": null,  ← Not used for this call/response
      "oldPassword": null,  ← Not used for this call/response
      "pointsToAward": 1000,
      "admin": false,
      "imageBytes": "\/9j\/4AAQSkZJB………K/DCF\/\/2=\n",  ← A very long String
      "location": "Chicago, Illinois",
      "rewards": null  ← No rewards for this user
},
{
      … more user data …
},
{
      … more user data …
}]
```

Other: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection. HTTP_FORBIDDEN , etc)

```
{
   "errordetails": {
      "timestamp": "10-03-2019 06:38:25",
      "status": "UNAUTHORIZED",  ← This can vary by error type
      "message": "Invalid username/password combination.",  ← Use as a
      "subErrors": []  ← Not used for this call/response      message to user
   }
}
```

5) **Add Rewards**:

Base URL + “/rewards”

Connection:

Request Method: POST
Request Property: “Content-Type”: “application/json; charset=UTF-8”
Request Property: "Accept", "application/json"

JSON to Send:

```
{
      "target": {  ← This is the user who gets the award
            "studentId": "123456789",
            "username": "user456",
            "name": "Olivia Combs",
            "date": "03\/10\/2019",  ← Use current date
            "notes": "Thanks for the help!",
            "value": 100  ←Int reward value
      },
      "source": {  ← This is the user who gives the award
            "studentId": "123456789",
            "username": "user555",
            "password": "pass555"
      }
}
```

Returns:

HttpURLConnection.HTTP_OK:

```
Reward Added Successfully ← This is text, not JSON
```

Other: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection. HTTP_FORBIDDEN , etc)

```
{
    "errordetails": {
      "timestamp": "10-03-2019 06:38:25",
      "status": "UNAUTHORIZED",  ← This can vary by error type
      "message": "Invalid username/password combination.",  ← Use as a
      "subErrors": []  ← Not used for this call/response     message to user
    }
}
```

F) Additional Utility API Commands *(not required, but useful when testing)*

The below three API calls are *NOT* needed by the app, but might be useful for you when developing and testing your app. These 3 calls are 1) Reset all Rewards *(this will remove all rewards given to other users and reset all user's points-to-give totals).* 2) Delete User *(this will delete the specified user).* 3) Delete All Users *(this call deletes all users for the specified student id).*

1) Reset All Rewards

Base URL + "/resetprofiles"

Connection:
Request Method: POST
Request Property: "Content-Type": "application/json; charset=UTF-8"
Request Property: "Accept", "application/json"

JSON to Send:

```
{
        "studentId": Student ID Number,
        "username": User Name,  ← Any admin user ID
        "password": Password
}
```

Example:

```
{
        "studentId": "123456789",
        "username": "user555",
        "password": "pass555"
}
```

Returns:

HttpURLConnection.HTTP_OK:

```
Profiles Reset Successfully  ← This is text, not JSON
```

Other: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection. HTTP_FORBIDDEN , etc)

```
{
    "errordetails": {
      "timestamp": "20-03-2019 06:38:25",
      "status": "UNAUTHORIZED",  ← This can vary by error type
      "message": "Invalid username/password combination.",
      "subErrors": []  ← Not used for this call/response
    }
}
```

2) Delete User

Base URL + “/profiles”

Connection:
Request Method: DELETE
Request Property: “Content-Type”: “application/json; charset=UTF-8”
Request Property: "Accept", "application/json"

JSON to Send:

```
{
        "admin": {
              "studentId": "123456789",
              "username": "user911",  ← Any admin user ID
              "password": "pass911"
        },
        "username": "user888"  ← The user to delete
}
```

Returns:

HttpURLConnection.HTTP_OK:

```
Profile Deleted Successfully  ← This is text, not JSON
```

Other: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection. HTTP_FORBIDDEN , etc)

```
{
    "errordetails": {
      "timestamp": "20-03-2019 06:38:25",
      "status": "UNAUTHORIZED",  ← This can vary by error type
      "message": "Invalid username/password combination.",
      "subErrors": []  ← Not used for this call/response
    }
}
```

3) Delete All Users

Base URL + “/allprofiles”

Connection:
Request Method: DELETE
Request Property: “Content-Type”: “application/json; charset=UTF-8”
Request Property: "Accept", "application/json"

JSON to Send:

```
{
        "studentId": "123456789",
        "username": "user911",  ← Any admin user ID
        "password": "pass911"
}
```

Returns:

HttpURLConnection.HTTP_OK:

```
Profiles Deleted Successfully  ← This is text, not JSON
```

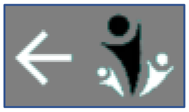
Other: (i.e., HttpURLConnection.HTTP_BAD_REQUEST, HttpURLConnection. HTTP_FORBIDDEN , etc)

```
{
    "errordetails": {
      "timestamp": "20-03-2019 06:38:25",
      "status": "UNAUTHORIZED",   ← This can vary by error type
      "message": "Invalid username/password combination.",
      "subErrors": []  ← Not used for this call/response
    }
}
```

G. Provided Images

The following image assets are provided for you to use with this project:

arrow_with_logo.png



background.png

Inspiration
Rewards

default_photo.png

icon.png

login_people.jpg

logo.png

(also used as launcher icon)

name_image.png

Inspiration
Rewards

separator.png

H. Menu Icons

For the required menu icons, you can use the build-in android menu icons:

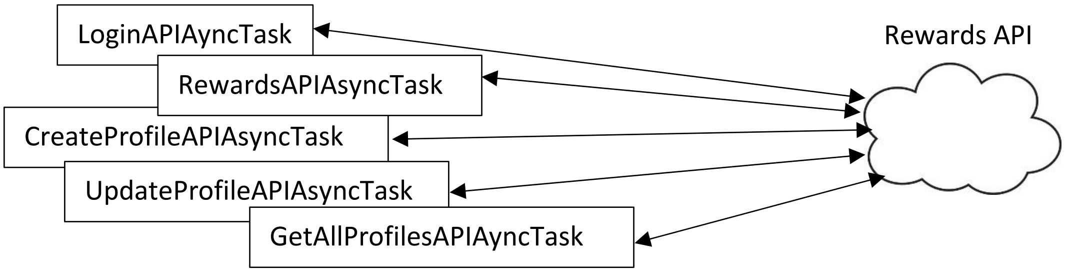
ic_menu_edit

ic_menu_sort_by_size

ic_menu_save

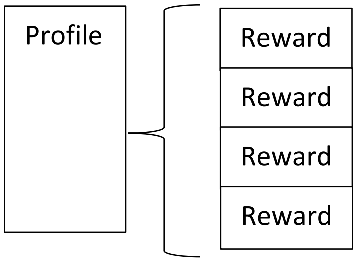
I. Other Classes

- You will need AsyncTasks to execute the API calls described earlier and to receive their returned data.


LoginAPIAyncTask
RewardsAPIAsyncTask
CreateProfileAPIAsyncTask
UpdateProfileAPIAsyncTask
GetAllProfilesAPIAyncTask
Rewards API

- You will need to create a class to represent the user profiles

- You will need to create a class to represent the rewards a user receives.



Assignment Assistance

The TAs for our course is available to assist you with your assignment if needed. Questions on assignment requirements and course concepts can be sent to the instructor.

Submissions & Grading

1) Submissions must consist of your zipped project folder *(please execute Build =>Clean Project before generating the zip file*).
2) Submissions should reflect the concepts and practices we cover in class, and the requirements specified in this document.
3) Grading will be based upon the presence and proper functionality of all features and behaviors described in this document.

NOTE

This assignment is worth 400 points. This means (for example) that if you get 89% on this assignment, your recorded score will be:

(89% * 400 points = 356 points)

If you do not understand anything in this handout, please ask.

Otherwise the assumption is that you understand the content.

Unsure? Ask!