



# Application for Web&Mobile Operations Coordinator

# 2018

Name:	Nick:
Roll No.:	Hostel:
Email:	Room No.:
Department: Web & Mobile Operations	Contact:No.:

#### **General Instructions:**

- 1) Try to complete as many questions as possible.
- 2) If you are not able to solve the problem statements, feel free to contact us for any help.
- 3) There are bonus points for a well-structured and readable project.

#### **Common Questions:**

- 1) What do you think are the pros and cons of the Saarang 2017 website and mobile app?
- 2) How do you think you can improve the present website and app? (You can suggest an improvement to an existing feature or suggest a new feature).
- 3) Mention any work you have done related to WebOps/MobOps/Programming. What are the programming languages / web frameworks you know?
- 4) What makes you think that you are suitable for this position? Give credentials and references?
- 5) During Saarang, there is a lot of inter-departmental collaboration happening, what departments do you think the Web and Mobile Operations department is concerned with? State why and how these departments are important for Web and Mobile Operations.

## **Problem Statement for Web/Hybrid App Development:**

Submit a zipped folder with your app and project files in it.
Name the folder depending on the sub department you want to apply for (<YourName>\_WebOps.zip) OR (<YourName>\_Hybrid\_App.zip)

#### 1. Registration form:

- a. Make a sample registration form, where a user can register for an event
- b. The user should be able to select one event from the given options (you can make your own options).
- c. Make sure user inputs all the necessary data in the form (data which you feel is necessary for him to participate in an event).
- d. Make sure your form validates the input and proper error messages are shown (i.e. form cannot be submitted if there is any error).
- e. The form should be well structured and neat.

#### **Bonus points**

- Make it responsive and good looking.
- Use **AngularJs** to validate the form.
- Highlight the portion of the form with errors (if any).

#### 2. Animation:

- a. Make a mini solar system, with a star at the centre and three planets, revolving around it
- b. Planets should move around the star in circular orbits
- c. Monitor the motion using start, stop and reset buttons

#### **Bonus points**

- Monitor motion of each planet individually
- Make the revolution as realistic as possible
- You can start off from < http://www.w3schools.com/ >

### **Problem Statement for Android:**

Your project name should be <Your name>\_Saarang\_Android. Generate an APK file for the project and attach it with the project.

1. Write a simple application to display the names of events in Saarang as a list. When the user selects one of them, details such as:

- Event Category
- Description
- Schedule (Day and Time)
- Location of the event in IIT
- Coordinator name with contact information of that particular event should be displayed.
- 2. The user should be able to call the coordinator of that particular event from within the app by pressing a button. Also, he should be able to navigate to the registrations tab directly from the event detail page.
- 3. Make a registration tab with a form with basic questions such as:
  - Name
  - Email ID
  - Phone Number
  - School/College name

#### Note:

- There will be a total of 6 events and 3 categories (2 events per category).
- Whenever the app starts, the user will be asked what all categories of events he is interested in (a simple checklist will do) and show only those events in the list. ("Nothing to show" should be displayed in case no category is selected).

#### **Bonus points for:**

- Making an interface to send emails to the coordinator of the event.
- Adding an option to add the time and day of the event to Google Calendar by clicking on a button.
- Making an interface such that the event category preference is saved after the first time
  the user uses the app, and add an activity that allows him/her to change the preference.
  Add a button to navigate to this activity in the toolbar of the event list activity. Now,
  instead of asking the user to select the categories he is interested in again and again,
  we only ask it once, the first time.
- Using the latest containers suggested by Google.
- Making the app good looking.

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