Welcome to the Algofocus, phase 2 of hiring process. This phase 2 is meant to evaluate various aspects for development life cycle in comprehensive manner.

(A) Instructions For Assignment

- 1: You can choose one out of any two streams i.e., Webapp [WA] and Android app [AA].
- 2: If you are confident enough to take both streams then it is welcome however it is not necessary.
- 3: Both of streams WA and AA, contains two problems which are compulsory for the streams.

(B) Submission Policy:

To evaluate the your coding style, self-learning capability, code optimization, standard coding practice, you need to submit you codes at,

- 1: Google drive shared folder and name them as per the stream and problem number like WA1 or WA2 for Webapp where as AA1 or AA2.
- 2: Put a readme file to understand the program flow, resource used (i.e. for reference e.g. URLs, tutorials, documents etc.)
- 3. You need to share your code at your **personal github repo** and send us the repo link using a separate file share in Google drive for your activity **'myActivity.docx'** with date wise entries. You can post any related remark, doubts here.

(C) Code Demo/deployment Policy:

- 1: for [WA] You need deploy Webapp onto heroku/any hosting instance and share the app link with us using 'myActivity.docx'.
- 2: for [AA] you need to upload apk file in Google drive and share the apk link with us using 'myActivity.docx'.
- (D) Time Duration: Starting from November 7, 2016 to November 13, 2016, 6 PM i.e. roughly about 7 days.

(E) Ethical Policy:

You can refer any material (give reference in readme file for which issue you are making reference) however, copying is not allowed.

The final code to be submitted should be on your coding style otherwise you may not able to explain the code upon follow up.

(F) Expectation:

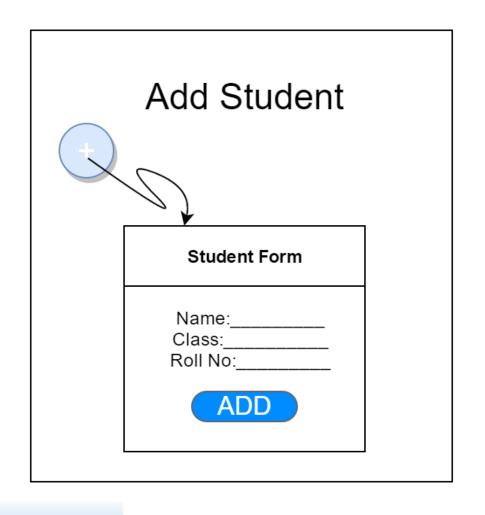
This coding phase is to design to evaluate your skills to your own development environment and your ability to function Individual contributor.

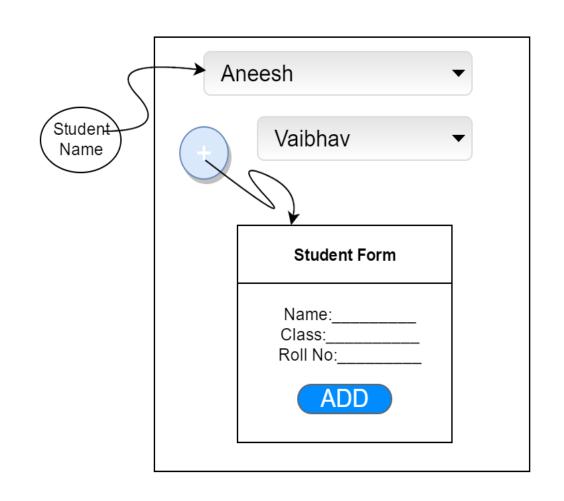
(G) Please write to us, ashutosh@algofocus.com and satyaki@algofocus.com reach to Satyaki - 8588855808 (only in case very urgent situation)

Final Note: Please do enjoy the assignments and BEST OF LUCK.

Android App Stream – AA1

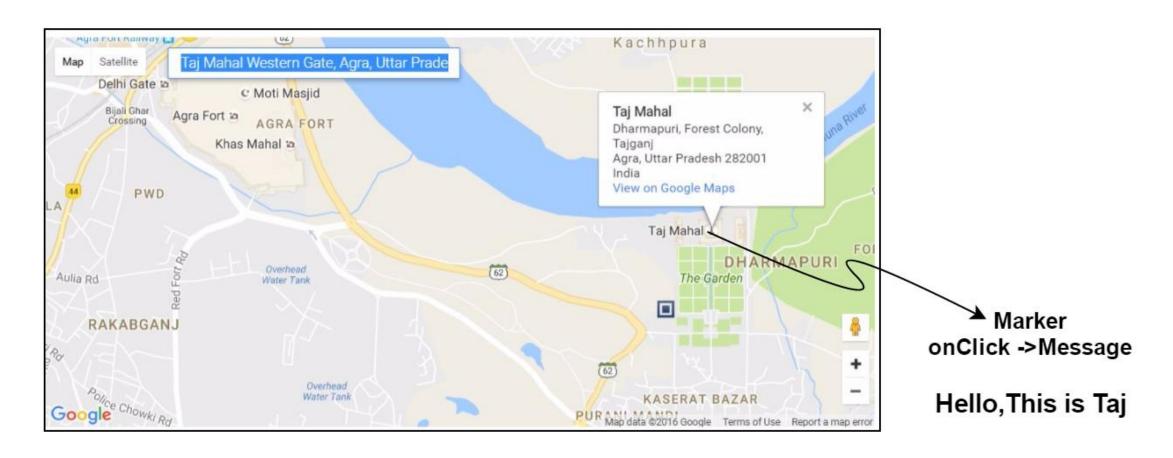
Make a layout which have a button and onClick event of this button an expandable student form appears with "Add" button when the add button clicks the new student is added to the list of students.





Android App Stream – AA2

Make a Google Map using Google Map API's where on search button if user searches TAJ MAHAL. The Map shows its location with a Marker and on Click event of this marker a message is shown like "Hello, This is TAJ".





Web App Stream – WA1

Synonym Search App

Develop a web-app where there will be two components.

A: User can add a word and a list of synonyms for that word. Basically these data will be stored in database.

- Use Table 'name: words_synonyms' for storing data
- Columns: word,synonym

B: There would be a posts table let's say

- Table name: posts
- Columns: id,post_content

Manually insert 10 posts into table by using db insert command. Now user will see a search form where he will input a keyword. App will check if that word exists in word_synonyms table. If yes it would fetch all posts having this keyword as well as synonyms of this word in them.

Hint: This will be a exact phrase search. No advance search query needed.

- Technology to be used: Java / PHP, JSP, JDBC
- Database to be Used: MySQL preferably



Web App Stream – WA2

Employment App

Develop a webapp where there will be two components.

A: Candidates can fill up basic details like name,age,email,highest qualification etc. In a form and submit his resume. You have to apply client side as well as server side validations in this form. Like name cannot be empty/email should be valid and must be filled also resume should be in doc/pdf. Once candidate successfully submits details these data should be save in candidates table and resume must be saved in file storage and its exact path must be stored in candidates table.

B: After candidates successfully submits all the details and uploads resume an email will be sent to candidates mail id(that mail id which he has given while filling up the details) which will contain the link of candidate's resume (exact url of the resume uploaded on file server).

• Technology: Java / PHP,JSP,JDBC

• Database: MySQL preferably

Post development you have to submit this code to your personal github repo and send us the repo link. Also you need deploy this web app onto heroku/any hosting instance and share the app link with us.

