

## Design a Calculator Application

**Allowed Time** - 3 days

**Programming Language:** Django, Python, React/Angular/jQuery/Javascript

Create a simple calculator which could be used to do basic operators like addition, subtraction, multiplication, division. The calculator should be able to evaluate multi operand expressions and should follow the **bodmas** rule. It should also support decimal numbers.

Invalid expressions should be handled gracefully.

### **Examples:**

- Input =  $2+3+3$ , Output = 8
- Input =  $5 / 2 - 3$ , Output = -0.5

### **Features of Application**

1. A Django app with Login/Signup functionality. Create a user Profile with basic attributes like : first name, last name, email, Address, profile pic.
2. After a successful user login, the user will be able to access the calculator UI.
3. View/Edit profile feature will be there.
4. Proper Validation and Exception/Error handling.
5. Create rest api's in the django backend to store every user's calculation result.
  - a. Example : User performed an operation  $3+4-6+7*4$ . Now, Store this expression in the model along with your calculator's result.

**\*Note:** Avoid using ready made libraries for expression evaluations.

### **Submission Format**

1. You need to submit the code and database dump in the form of a Github Repo on or before your scheduled deadline.
2. Bonus points if the project is deployed on Heroku/AWS/PythonAnywhere with a functional URL.

### **Evaluation Criteria**

1. Code quality - The code should be well structured.
2. Completeness - All the features listed above should work as expected.
3. Presentability - The user interface must be clean and usable.

**\*Note:** Any copy-pasting of code from any source on the Internet will lead to immediate disqualification.