



# Summer Fellowship Report

On

**Django/Python**

Submitted by

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# Acknowledgment

The internship opportunity I had with FOSSEE IIT Bombay was a great chance for learning and professional development. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many wonderful people and professionals who led me through this internship period.

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Secondly, I express our gratitude to Mr. Prashant Sinalkar, who mentored me during my project and kept me encouraged throughout, which helped me in the successful completion of my project. It is my radiant sentiment to place on record my best regards to my mentor for their careful and precious guidance which were extremely valuable for my study both theoretically and practically.

I perceive as this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation with all of you in the future,

Sincerely,

Muhammad Kasim

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# Chapter 1

## Introduction

Task given to me is Bug Fixings and Improvements on site **Fossee-forums**. *Fossee-forums* (*forums.fossee.in*) is built on Django in Python. This site is used to discuss the topics through questions, answers and comments among the users and fossee experts.

### 1.1 Django

Django is a free and open source web application framework, written in Python. A web framework is a set of components that helps you to develop websites faster and easier.

Django is really awesome at building dynamic website really fast. It is completely based on MVC. It has default admin section to handle the database easily. It has Magical ORM(Object Relational Mapper). It has better security.

# Chapter 2

## Fossee-forums

### 2.1 Moderator Mode

- Moderator can edit the question, answer and comment of his category through Moderator panel.
- Moderator can also delete and restore them.
- Moderator can ask questions, submit an answer and post a comment through his user panel.
- System Admin can only add a user as Super Moderator or Moderator of specific Category.

### 2.2 User Mode

- User can ask questions, submit an answer or post a comment.
- User can also edit or delete his posted question, answer or comment with some restrictions.

### 2.3 Anonymous User

- Anonymous User can only view questions, answers and comments.
- But can't comment or post answers or questions.

# Chapter 3

## Bug Fixing

### 3.1 Editing DataSet.xlsx through moderator

Following Function has been defined to edit the DataSet.xlsx. it is used to add spam or not spam.

```
1 def add_Spam(question_body, is_spam):
2     xfile = openpyxl.load_workbook(settings.PROJECT_DIR + '/static/website/DataSet.
3     xlsx')
4     sheet = xfile['Data set']
5     n = len(sheet['A']) + 1
6     for i in range(2, n):
7         if(question_body == str(sheet.cell(row=i, column=1).value)):
8             sheet.cell(row=i, column=2).value = is_spam
9             xfile.save('DataSet.xlsx')
10            return
11    sheet['A%s' % n] = question_body
12    sheet['B%s' % n] = is_spam
13    xfile.save('DataSet.xlsx')
```

### 3.2 Replacing NicEditor with Default CKEditor for Editing Answer

#### Problem:-

When More than one CKEditor is being rendered in a template, then CKEditor doesn't showing. CKEditor creates a textarea and assigns an id to it and then style it. So, By default, CKEditor is assigning the same id to all the CKEditor rendered in the template.

#### Solution:-

An id attribute is being passed while rendering the CKEditor in the template so that CKEditor allote separate ids to its textarea.

Deleting the following code:

```
1 <h4><u>Answers:</u></h4>
2 <div id="answerPanelWrapper" style="display:none;">
3     <div id="answerNicPanel" style="display:none;"></div>
4 </div>
```

Adding the following code:

```
1 {% if MODERATOR_ACTIVATED or user|can_edit:answer and answer|havenot_comments %}
2   <form id="form{{ answer.id }}" method="POST" action="{% url 'website:
3     ajax_answer_update' %}">
4     {% csrf_token %}
5     <input type="hidden" name="answer_id" value="{{ answer.id }}">
6     <div class="edit-answer" id="ans{{ answer.id }}1">
7       {% render_field form.body class+="form-control body" name="answer_body"
8         id=answer.id %}
9     </div>
10  </form>
11 {% endif %}
12 <div id="ans{{ answer.id }}2">{{ answer.body| safe }}</div>
13 {% if MODERATOR_ACTIVATED or user|can_edit:answer and answer|havenot_comments %}
14   <script type="text/javascript">
15     CKEDITOR.on("instanceReady", function(event)
16     {
17       CKEDITOR.instances['{{ answer.id }}'].setData(document.getElementById("
18     ans{{ answer.id }}2").innerHTML);
19     });
20   </script>
21 {% endif %}
```

### 3.3 Replacing NicEditor with Default CKEditor for Posting Comment

Deleting the following code:

```
1 <div id="commentPanelWrapper" style="display:none;">
2   <div id="commentNicPanel" style="display:none;"></div>
3 </div>
```

Adding the following code:

```
1 <div class="new-comment" id="comment{{ answer.id }}1">
2   {% render_field form.body class+="form-control body" id=answer|comment_id %}
3 </div>
```

### 3.4 Adding Option for Editing Comments

**Problem:-**

Comment can't be edited.

**Solution:-**

The option is now being added for editing comment. The user who have posted the comment will be able to edit the comment if there is no comment posted after that comment. But the moderator can be able to edit any comment through Moderator Panel.

### **3.5 Adding Option for Restoring Question, Answer and Comment**

**Problem:-**

When a User or Moderator deleted a question, answer or comment, then it was deleted from the database permanently and can't be restored later.

**Solution:-**

Now Questions, Answers and Comments are only being deactivated through a boolean variable and can be restored by Moderator through Moderator Panel. But user can't restore it. User can delete its question only when no answer is being posted under it and also can delete its answer if there is no comment posted under it. But Moderator can delete any question, answer and comment related to its category at any time and can also restore them. Restoring answers and comments have some restrictions. Answers can only be restored when its question is not deleted and Comments can only be restored when its answer is not deleted.

### **3.6 Sending E-mails to all User in the thread of the question**

When the question, answer or comment is being edited by a moderator or user, The Emails are being sent to all the users who have posted any answer or comment under that question.

### **3.7 Sorting the questions in the Table in the results after search**

**Problem:-**

DataTable was not applying on the results after the search.

**Solution:-**

Required Ajax is now being added to apply the dataTable on the result after search.

### **3.8 Redirecting to the same Page in Moderator Panel as requested from User Panel by Moderator**

**Problem:-**

When the moderator requests for Moderator panel from user panel, Moderator Home page is being opened. So The Moderator requests Moderator panel from question, then he being redirected to the Moderator panel. So he has to again search for that



question.

#### **Solution:-**

Now When The User requests for the Moderator panel, then the same page is being returned to the moderator in Moderator panel.

### **3.9 Option for adding Image to the FossCategory while Creating**

#### **Problem:-**

When Admin add a fosscategory in the database, then for adding its image, he had to paste it at a specified location with the same name as the name of fosscategory.

#### **Solution:-**

But Now the image can be uploaded through the django admin panel while creating the fosscategory.

### **3.10 Option for Categorising the question in data Tables**

The option is being added in Home page, questions page, search page, etc. in user panel and moderator panel for filtering the rows according to the FossCategory in the DataTable.

### **3.11 Error message showing through HttpResponseRedirect is being replaced with messages in django**

#### **Problem:-**

Some Errors werenot handling properly. These errors are being showed through HttpResponseRedirect().

#### **Solution:-**

Now these errors are being passed through default message passing method in django.

#### **For Example:-**

Following code is being replaced:

```
1 return HttpResponseRedirect('Only moderator can delete.')
```

with the following code:

```
1 messages.error(request, "Only Moderator can delete.")
2 return HttpResponseRedirect('/question/{0}/'.format(comment.answer.question.id))
```

in template:

```
1 {% if messages %}
2   {% for message in messages %}
3     <div class="alert alert-danger h5">
4       <a class="close" data-dismiss="alert" aria-label="close" style="color:
5         black;">&times;</a>
6         <b>{{ message }}</b>
7     </div>
8   {% endfor %}
9 {% endif %}
```

## 3.12 All codes are being arranged through PEP8

All Previous code and Present Code are being edited and arranged according to PEP8 Standards.