"COLLEGE FORM"

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING



RGUKT Rajiv Gandhi University of Knowledge Technologies R.K.VALLEY

Submitted by

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Under the Esteemed guidance of Mr. Satya Nandaram N RGUKT RK Valley.

DECLARATION

We hereby declare that the report of the B.Tech Minor Project Work entitled " **COLLEGE FORM** " which is being submitted to Rajiv Gandhi University of Knowledge Technologies, RK Valley, in partial fulfillment of the requirements for the award of Degree of Bachelor of Technology in Comput Science and Engineering, is a bonafide report of the work carried out by us. material contained in this report has not been submitted to any university or institution for award of any degree.

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Dept. Of Computer Science and Engineering.

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES



(A.P.Government Act 18 of 2008)
RGUKT, RK VALLEY
Department of Computer Science and Engineering

CERTIFICATE FOR PROJECT COMPLETION

This is certify that the project entitled " COLLEGE FORM " submitted by **C.Nagamani(R170538)**, **A.Vanaja(R170550)** under our supervision Partial fulfillment for the degree Bachelor of Technology in Computer Science And Engineering during the academic semester - 2 2021-2022 at RGUKT, RK - VALLEY .To the best of my knowledge, the results embodied in this dissertation work have not been submitted to any University or Institute for the award of any degree or diploma.

Project Internal Guide

Head of the Department

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Assistant Professor
RGUKT, RK Valley

Mr.P.Harinath

HOD Of CSE

RGUKT, RK Valley

Abstract

A Question and Answer Software is a software that focuses on answering the questions one might put up on an online platform. These are usually implemented by large organizations which aim on implementing platform where users can clear doubts about their respective fields. It varies from smallscale to large scale or from topiic to to topic. Many of these platforms may restrict access to either their employees or make it a public one material. The disadvantages of the existing systems are less security, searching efficiency is less, chances of faking answer. One may access these sites / Applications from anothers system in case they are not public or access the ones which are and post answers which aren't relevant. Sometimes people even lie on such platforms and there might not be any checker to cross - analyze these answers. Now one might also want similar answers to their question which may resolve their query beforehand.

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SRS DOCUMENT

Introduction:

This document has the requirements of Answering questions and clearing doubts of students.It is an Online network which would attract people wanting answers to their respective questions.

1.1:Purpose

The purpose of this document is to gather the requirements that are needed for implementing Th "estudent form". It also focuses on various key features, the product, product vision and scope, product overview. The main purpose of Student form is to provide a platform to the students to clear their doubts.

1.2:Intended Audience:

The intended audience will be the users who can access the platform to get answers from commoners and experts related to the students doubts.

Users:

- 1. Students
- 2. Admin

Product Vision:

Vision Statement:

The product vision is to develop a software hepls people to gain more information and become Knowledgable about important topics. It can be extremely for people of all age groups.

Technologies:

- > HTML,CSS
- > Jquery
- > Bootstrap
- ➤ Django
- > sqlite

REQUIREMENT SPECIFICATION

Hardware Configuration:

Client Side:

| Ram | 4GB |
|-----------|---|
| Harddisk | 487.0 GB |
| Processor | AMD® A9-9420 radeon r5, 5 compute cores 2c+3g × 2 |

Server Side:

| Ram | 4GB |
|-----------|---|
| Harddisk | 487.0 GB |
| Processor | AMD® A9-9420 radeon r5, 5 compute cores 2c+3g × 2 |

<u>Software Configuration:</u>

| Front end | HTML,CSS,Jquery,Bootsrap |
|----------------------|--------------------------|
| Server side language | Python,Django |
| Database server | Sqlite |
| Web browser | Firefox,Google chrome |
| Operating system | Ubuntu |

Functional Requirements:

- These requirements include product perspective, features, user characteristics, assumption and dependencies, domain requirements, user requirements.
- They help analyze the reason why the product was created, what all features it has and requires, like private questions, similarity search, rate answers etc.
- The requirements of both the user and domain are analyzed which shows that normal user can answer, post, ask questions and an expert can answer both private and unanswered questions whereas the admin can delete both the users and observe the system they have whole control.

Non-Functional Requirements:

- They help analyze the reason why the product was created, what all features it has and requires, like private questions, similarity search, rate answers etc.
- The requirements of both the user and domain are analyzed which shows that normal user can answer, post, ask questions and an expert can answer both private and unanswered questions whereas the admin can delete both the users and observe the entire system as they have whole control.

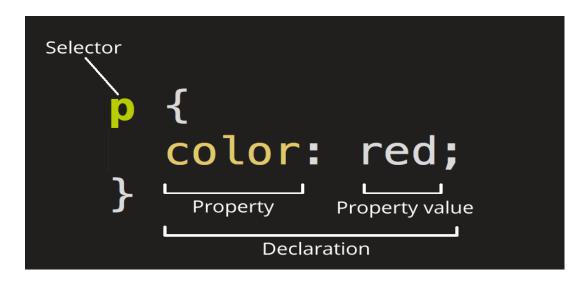
HTML:

HTML (HyperText Markup Language) is the code that is used to structure a web page and its content. For example, content could be structured within a set of paragraphs, a list of bulleted points, or using images and data tables.



CSS:

CSS (Cascading Style Sheets) is used to style and layout web pages for example, to alter the font, color, size, and spacing of your content, split it into multiple columns, or add animations other decorative features



Bootstrap:

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

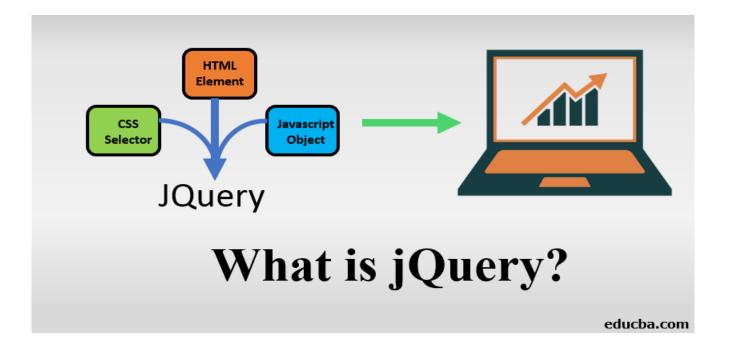
Django:

Django is a high-level Python web framework that enables rapid development of secure and maintainable websites. Built by experienced developers, Django takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel.



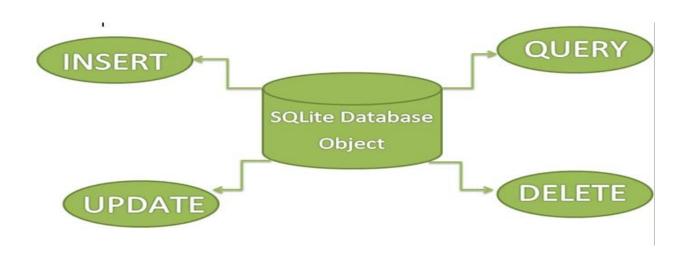
Jquery:

.jQuery is a lightweight, "write less, do more", JavaScript library. The purpose of jQuery is to make it much easier to use JavaScript on your website. jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, wraps them into methods that you can call with a single line of code.



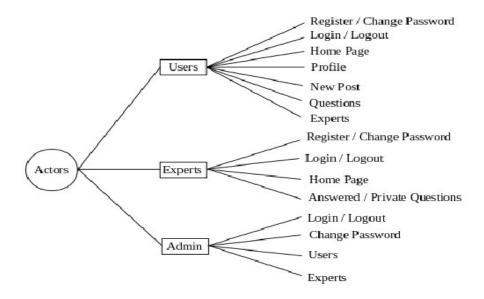
SQlite:

SQLite is a C-language library that implements a small, fast, self-contained, high-reliability, full-featured, SQL database engine. SQLite is the most used database engine in the world. SQLite is built into all mobile phones and most computers and comes bundled inside countless other applications that people use every day.

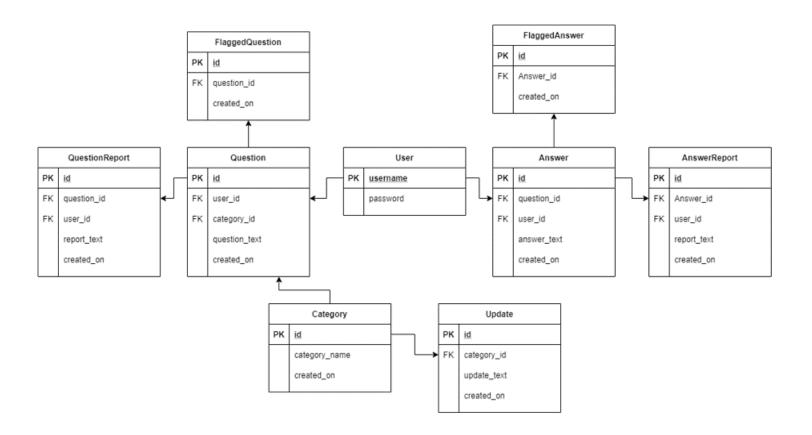


DESIGN AND ANALYSIS

Use case Diagram:



ER Diagram:



Agile Development

Agile

The Agile methodology is a way to manage a project by breaking it up into several phases. It involves constant collaboration with stakeholders and continuous improvement at every stage. Once the work begins, teams cycle through process of **planning**, **executing**, **and evaluating**. Continuous collaboration is vital, both Team members and project stakeholders.



Agile methodology:

It's a process for managing a project that involves constant collaboration and working in iterations. Today, the word Agile can refer to these values and the frameworks for implementing them, including Scrum, Kanban, Extreme Programming (XP), and Adaptive Project Framework (APF).

Agile

A project management methodology characterized by building products using short cycles of work that allow for rapid production and constant revision.

Kanban

A visual approach to project management where teams create physical representations of their tasks, often using sticky notes on whiteboards (or online apps). Tasks are moved through predetermined stages to track progress and identify common roadblocks.

Scrum

A PM methodology in which a small team is led by a Scrum master, whose main job is to clear away all obstacles to completing work. Work is done in short cycles called sprints, but the team meets daily to discuss current tasks and roadblocks.

Adaptive Project Framework (APF)

A project management methodology that grew from the idea that most IT projects can't be managed using traditional PM methods. Work is done in stages and evaluated after each one.

Extreme Project Management (XPM)

A PM methodology where the project plan, budget, and final deliverable can be changed to fit evolving needs, no matter how far along the project is.

How to Develop a project using Agile methodology

Agile Development is a Continuous Integration (CI) from Requirements gathering to testing the code..

We start the project Development with Requirements analysis and Gathering. In this we collect the data from the project description and draw the UML diagrams like **ER** diagram for database tables and **Use Case** diagram for implementation functionalities.

After we create a short stories like Login, Signup, Homepage Design, Database Creation From the requirements file.

SOURCE CODE

url.py

```
1 from django.urls import path
 2 from . import views
 4 urlpatterns = [
      path("register/", views.registerPage, name="register"),
 5
      path("login/", views.loginPage, name="login"),
 6
      path("logout/", views.logoutUser, name="logout"),
 7
      path('', views.landingPage, name='landingPage'),
 8
      path('home/', views.home, name='home'),
 9
10
      # forum links
      path('forum/<int:page>/', views.forum, name='forum'),
11
      # question crud
12
      path('forum/question/create', views.question create, name='question create'),
13
      path('forum/question/<int:id>/',
14
           views.question display, name='question display'),
15
      path('forum/question/update/<int:id>/',
16
           views.question_update, name='question_update'),
17
18
      path('forum/question/delete/<int:id>/',
           views.question_delete, name='question_delete'),
19
      # answer crud
20
      path('forum/answer/create/<int:question_id>',
21
22
           views.answer_create, name='answer_create'),
      path('forum/answer/update/<int:answer_id>',
23
24
           views.answer_update, name='answer_update'),
      path('forum/answer/delete/<int:answer_id>',
25
           views.answer delete, name='answer delete'),
26
27
      # updates
      path('updates/', views.updates, name="updates"),
28
29
      # reports
30
      path('forum/question/report/<int:id>/',
                                                                                    ı ▼ Tab Wid
            views.question report, name="question report"),
31
32
       path('forum/answer/report/<int:id>/',
33
            views.answer_report, name="answer_report"),
34
      # profile
      path('profile/', views.profile, name="profile"),
35
       path("autosuggest/", views.autosuggest, name="autosuggest"),
36
37 ]
38
                                                                                   P
```

View.py

```
1 from django.contrib.auth.decorators import login_required
 2 from django.shortcuts import render, redirect
 3 from django.http import HttpResponse, Http404, JsonResponse
 4 from django.contrib.auth.forms import UserCreationForm
 5 from django.contrib.auth import authenticate, login, logout
 6 from django.contrib import messages # for flash messages
 7 from .models import *
 8 from .filters import *
 9 # from .forms import CreateUserForm
10 from .forms import *
11 import logging
12 custom_db_logger = logging.getLogger("forum.custom.db")
13
14
15# for restricting users without login
16
17 # Create your views here.
18
19
20 def registerPage(request):
      if request.user.is_authenticated:
21
           return redirect('home')
22
23
      else:
24
           form = CreateUserForm()
25
           if request.method == 'POST':
26
               form = CreateUserForm(request.POST)
27
               if form.is_valid():
28
                   form.save()
29
                   user_msg = form.cleaned_data.get('username')
30
                   messages.success(request, 'Account was created for '+user_msg)
                                                                                 Python ▼
34
                   return redirect('login')
35
          context = {'form': form}
36
37
          return render(request, 'forum/register.html', context)
38
39
40 def loginPage(request):
41
      if request.user.is_authenticated:
42
          return redirect('home')
43
          # return redirect('forum/1')
44
45
          if request.method == 'POST':
              username = request.POST.get('username')
46
              password = request.POST.get('password')
47
48
              # request.POST.get('yearOfAdmission')
49
              user = authenticate(request, username=username, password=password)
50
51
52
              if user is not None:
53
                  login(request, user)
54
                   # landingpage should come here DOUBTFULL, earlier it was home
55
                   return redirect('home')
56
                   # return redirect('forum/1')
57
              else:
58
                  messages.info(request, 'Username OR Password is incorrect')
59
          context = {}
60
          return render(request, 'forum/login.html', context)
61
```

```
64 def logoutUser(request):
65
      logout(request)
      return redirect('landingPage')
66
67
69 def landingPage(request):
70
      if request.user.is_authenticated:
          return redirect("forum", page=1)
71
      return render(request, 'forum/landingPage.html', {})
72
73
74 # @login_required(login_url='landing')
75# put the below line above every view that you want to restrict if the user hasn't loggedin
76 # these are nothing but login decorators
77
78
79 @login_required(login_url='login')
80 def home(request):
      # context = {}
81
82
      # return render(request, 'forum/main.html', {})
83
      return redirect("forum", page=1)
84
86 @login_required(login_url='login')
87 def forum(request, page):
      questions = Question.objects.all().order_by('-created_on')
89
      # for searching
90
      question filter = QuestionFilter(request.GET, queryset=questions)
91
      questions = question_filter.qs
64 def logoutUser(request):
      logout(request)
65
      return redirect('landingPage')
66
67
68
69 def landingPage(request):
70
      if request.user.is_authenticated:
71
          return redirect("forum", page=1)
72
      return render(request, 'forum/landingPage.html', {})
73
74# @login_required(login_url='landing')
75# put the below line above every view that you want to restrict if the user hasn't loggedin
76 # these are nothing but login decorators
77
78
79 @login_required(login_url='login')
80 def home(request):
81
      # context = {}
      # return render(request, 'forum/main.html', {})
82
83
      return redirect("forum", page=1)
84
85
86 @login_required(login_url='login')
87 def forum(request, page):
      questions = Question.objects.all().order_by('-created_on')
89
      # for searching
90
      question_filter = QuestionFilter(request.GET, queryset=questions)
91
      questions = question_filter.qs
വാ
```

```
124
                question = form.save(commit=False)
125
                question.user_id = request.user
126
                question.save()
                # redirect to forum home
127
                return redirect("forum", page=1)
128
129
            else:
130
                print("form not valid")
131
        # if get
132
        context = {'form': form}
        return render(request, 'forum/question_create.html', context)
133
134
135
136 @login_required(login_url='login')
137 def question_display(request, id):
        question = Question.objects.get(id=id)
138
139
        author = question.user_id
140
        current_user = request.user
        answers = question.answer set.all().order by('-created on')
141
        # answer_authors = []
142
       # for answer in answers:
143
              answer_authors.append(answer.user_id)
144
145
       context = {
146
            'question': question,
147
            'answers': answers,
            'author': author,
148
            # 'answer_authors': answer_authors,
149
            'current user': current user
150
151
        return render(request, 'forum/question_display.html', context)
152
155 @login required(login url='login')
156 def question update(request, id):
157
       question = Question.objects.get(id=id)
       # redirect if question is not owned by the current user
158
159
       if(request.user != question.user_id):
           return redirect("question_display", id=id)
160
161
       form = QuestionCreateForm(instance=question)
       if request.method == 'POST':
162
           form = QuestionCreateForm(request.POST, instance=question)
163
           if form.is_valid():
164
165
                form.save()
166
                # redirect to question page
                return redirect("question_display", id=id)
167
168
       context = {'form': form}
       return render(request, 'forum/question_create.html', context)
169
170
171
172 @login required(login url='login')
173 def question_delete(request, id):
       if request.method == 'POST':
174
175
           question = Question.objects.get(id=id)
176
           if(request.user != question.user_id):
                return redirect("question_display", id=id)
177
178
           custom_db_logger.debug("%s deleted the question \"%s\""%(request.user, question))
179
           question.delete()
           return redirect('forum', page=1)
180
       else:
181
           raise Http404("page not found")
182
183
```

```
187 @login_required(login_url='login')
188 def answer_create(request, question_id):
189
       question = Question.objects.get(id=question id)
190
       # print(question)
191
       form = AnswerCreateForm()
       # if post
192
       if request.method == 'POST':
193
           form = AnswerCreateForm(request.POST)
194
           if form.is_valid():
195
196
                answer = form.save(commit=False)
197
               answer.user_id = request.user
               answer.question_id = question
198
199
               form.save()
200
               # redirect to forum home
               return redirect("question_display", id=question_id)
201
202
           else:
               print("form not valid")
203
       # if get
204
205
       context = {'form': form}
       return render(request, 'forum/answer create.html', context)
206
207
208
209 @login required(login url='login')
210 def answer_update(request, answer_id):
211
       answer = Answer.objects.get(id=answer_id)
212
       if(request.user != answer.user_id):
213
            return redirect("question display", answer id=answer.question id)
214
       form = AnswerCreateForm(instance=answer)
215
       if request.method == 'POST':
                                          . . . . . .
       er requesermentos -- rost-
216
          form = AnswerCreateForm(request.POST, instance=answer)
          if form.is_valid():
217
218
              form.save()
219
              # redirect to question page
220
              return redirect("question display", id=answer.question id.id)
221
       context = {'form': form}
       return render(request, 'forum/answer_create.html', context)
222
223
224
225 @login required(login url='login')
226 def answer delete(request, answer id):
       if request.method == 'POST':
227
228
           answer = Answer.objects.get(id=answer id)
229
           current question id = answer.question id.id
230
          if(request.user != answer.user_id):
              return redirect("question_display", id=current_question_id)
231
           custom db logger.debug("%s deleted the answer \"%s\""%(request.user, answer))
232
233
           answer.delete()
234
          return redirect('question_display', id=current_question_id)
235
     else:
          print("invalid access")
236
237
          raise Http404("page not found")
238
240
241
242 @login_required(login_url='login')
243 def updates(request):
       updates = Update.objects.all().order_by('-created_on')
```

```
context = {'updates': updates}
245
       return render(request, 'forum/updates.html', context)
246
247
249
250
251 @login_required(login_url='login')
252 def question_report(request, id):
253
       question = Question.objects.get(id=id)
254
       form = QuestionReportForm()
255
       errors = list()
256
       threshold = 1
257
       # check of a report already filed by the same user for the same question
258
       prev_report = QuestionReport.objects.filter(
259
           question_id=question.id, user_id=request.user.id)
260
       # if already done
261
       if len(prev_report) >= 1:
262
           errors.append("question already reported")
           return redirect("question_display", id=question.id)
263
264
       # else (new report)
       elif request.method == "POST":
265
266
           # create a new report
267
           form = QuestionReportForm(request.POST)
268
           if form.is_valid():
269
               report = form.save(commit=False)
270
               report.user_id = request.user
271
               report.question id = question
272
               report.save()
273
           # check if the question needs to be flagged
274
           total_reports = QuestionReport.objects.filter(question_id=question.id)
275
           if len(total_reports) == threshold:
276
               flagged_question = flaggedQuestion()
               flagged_question.question_id = question
277
278
               flagged question.save()
       return redirect("question_display", id=question.id)
context = {'form': form, 'errors': errors}
279
280
       return render(request, "forum/question_report.html", context)
281
282
283
284 @login required(login url='login')
285 def answer_report(request, id):
       answer = Answer.objects.get(id=id)
286
       form = AnswerReportForm()
287
       errors = list()
288
289
       threshold = 1
290
       # check of a report already filed by the same user for the same question
291
       prev_report = AnswerReport.objects.filter(
292
           answer_id=answer.id, user_id=request.user.id)
       # if already done
293
294
       if len(prev_report) >= 1:
295
           errors.append("question already reported")
           return redirect("question_display", id=answer.question_id.id)
296
297
       # else (new report)
       elif request.method == "POST":
298
299
           # file a new report
300
           form = AnswerReportForm(request.POST)
           if form.is_valid():
301
302
              report = form.save(commit=False)
               connet were id - convect were
202
```

```
report.user_id = request.user
303
304
               report.answer_id = answer
305
               report.save()
           # check if the question needs to be flagged
306
           total reports = AnswerReport.objects.filter(answer id=answer.id)
307
           if len(total_reports) == threshold:
308
309
               flagged answer = flaggedAnswer()
310
               flagged_answer.answer_id = answer
311
               flagged_answer.save()
               return redirect("question_display", id=answer.question_id.id)
312
313
       context = {'form': form, 'errors': errors}
314
       return render(request, "forum/answer_report.html", context)
315
316 # profile -----
317
318
319 @login_required(login_url='login')
320 def profile(request):
       questions = Question.objects.filter(
322
           user_id=request.user.id).order_by('-created_on')
323
       answers = Answer.objects.filter(
324
           user_id=request.user.id).order_by('-created_on')
       context = {'questions': questions, 'answers': answers}
return render(request, "forum/profile.html", context)
325
326
327
328
329 def autosuggest(request):
       query_original = request.GET.get('term')
330
331
       queryset = Question.objects.filter(question_text__icontains=query_original)
       mylist = []
332
                                                                                Nithon - T
329 def autosuggest(request):
330
       query_original = request.GET.get('term')
       queryset = Question.objects.filter(question_text__icontains=query_original)
331
       mylist = []
332
       mylist += [x.question_text for x in queryset]
333
       return JsonResponse(mylist, safe=False)
334
                                                                           Python
```

EVALUATION

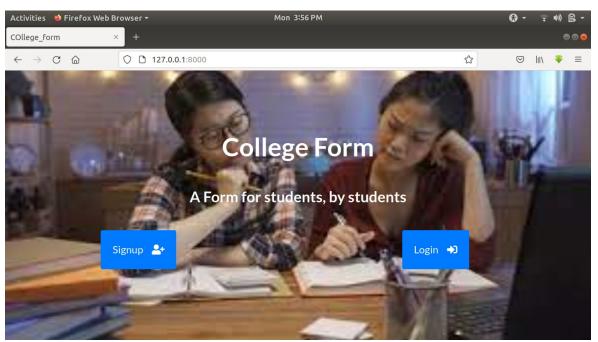
Image references:

```
Activities Terminal * Student@r170538: ~/Desktop/Collegeform/Collegeform/Collegeform/mystudent

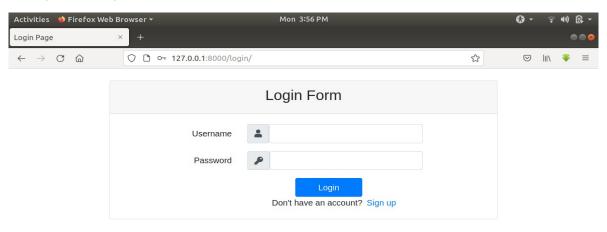
File Edit View Search Terminal Help
student@r170538: ~/Desktop/Collegeform/nystudent$ python3 manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
September 19, 2022 - 10:24:57
Diango version 3.2.15, using settings 'mystudent.settings'
Starting development server at http://127.0.0.1:8000/
Outt the server with CONTROL-C.
```

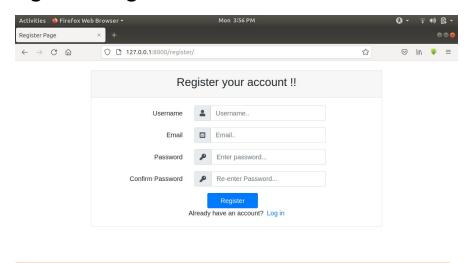
HOME PAGE:



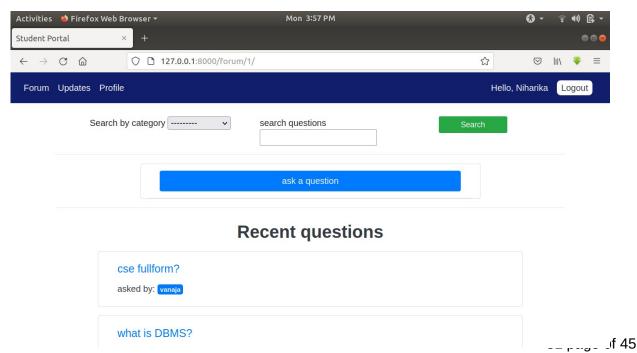
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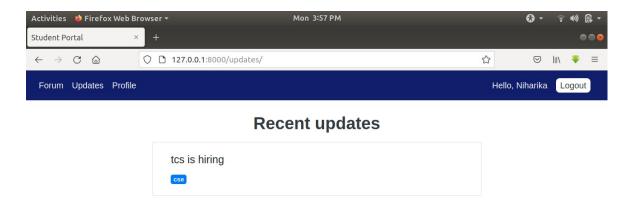
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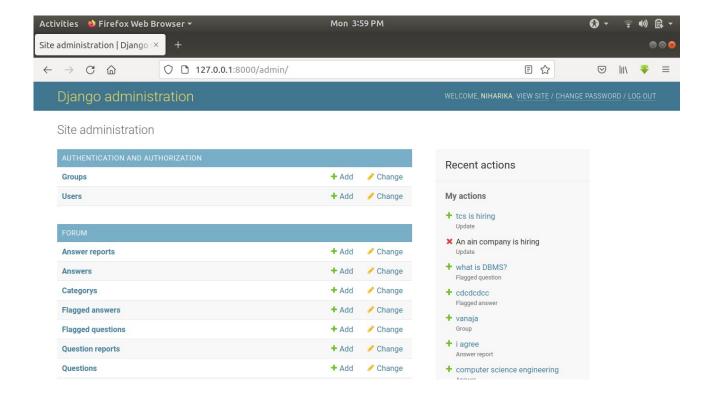
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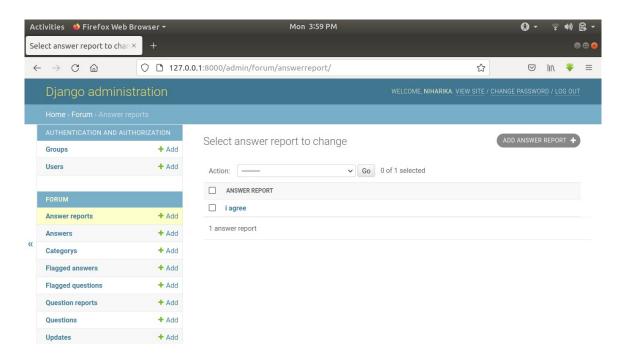
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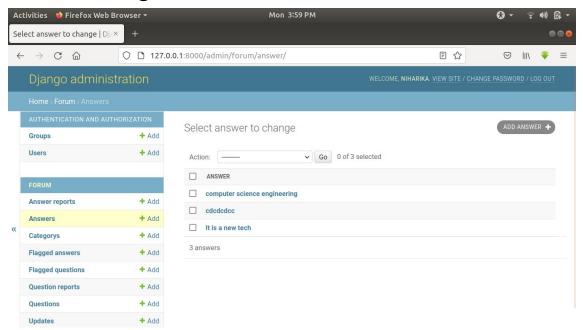
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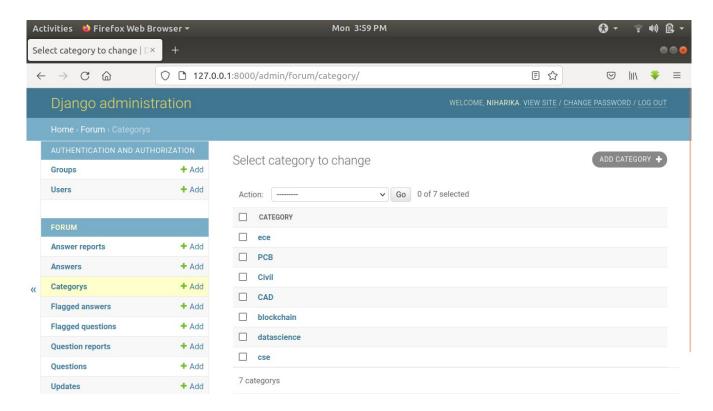
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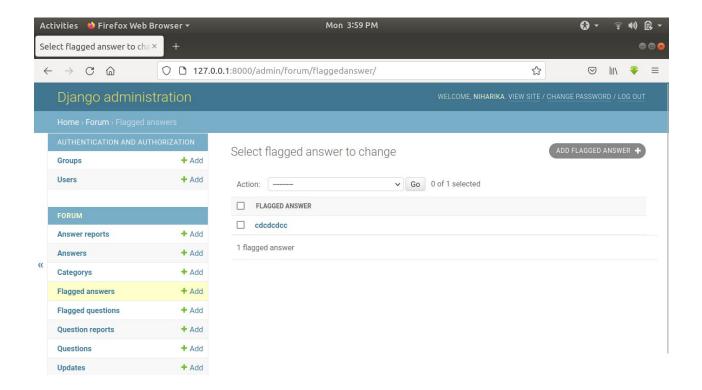
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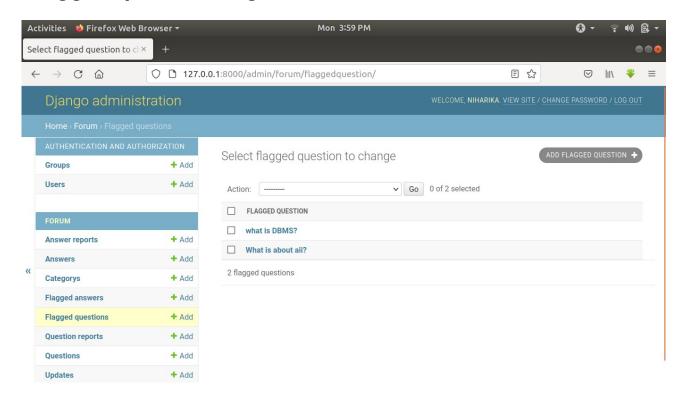
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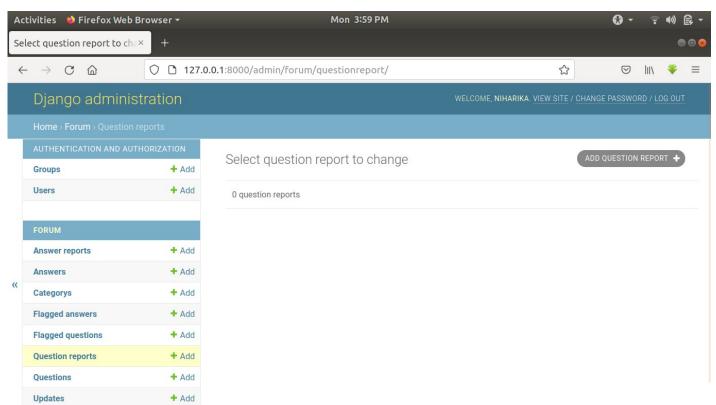
Flagged Page:



Flagged question Page:



Question Report Page:



References

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