```
# index.html

1.    <!DOCTYPE html>
2.    <html lang="en">
3.
4.    <head>
5.        <meta charset="UTF-8">
6.        <meta http-equiv="X-UA-Compatible" content="IE=edge">
7.        <meta name="viewport" content="width=device-width, initial-scale=1.0">
8.        <title>Kanban</title>
9.        <!-- bootstrap -->
10.       <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
11.       <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
12.       <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.bundle.min.js"></script>
13.   </head>
14.
15.   <body class="bg-dark">
16.       <div class="container">
17.           <h1 class="font-weight-light text-light pt-5 text-center">Welcome to your Kanban Board!</h1>
18.           <div class="row flex-row flex-sm-nowrap justify-content-center py-5">
19.               <div class="col-sm-6 col-md-4 col-xl-3">
20.                   <div class="card bg-light">
21.                       <div class="card-body">
22.                           <h6 class="card-title text-uppercase text-center text-truncate py-2">To Do</h6>
23.                           {% for todo in todos %}
24.                           <div class="items mb-3">
25.                               <div class="card draggable shadow-sm" id="{{ todo.id }}" draggable="true">
26.                                   <div class="card-body p-2">
27.                                       <div class="card-title">
28.                                           <form action="{{ url_for('del_task') }}" method="POST">
29.                                               <input type="hidden" name="task_id" value="{{ todo.id }}" />
30.                                               <input type="submit"
31.                                                   class="close float-right text-danger bg-transparent border-0"
32.                                                   value="&times;" />
33.                                           </form>
34.                                           <a href="/" class="lead font-weight-light">{{
35.                                               todo.title }}</a>
36.                                       </div>
37.                                       <p>{{ todo.content }}</p>
38.                                       <form action=" {{ url_for('move_task') }}" method="POST">
39.                                           <input type="hidden" name="task_id" value="{{ todo.id }}" />
40.                                           <span class="text-muted">Move to:</span>
41.                                           <select name="panel" onchange="this.form.submit()"
42.                                               class="custom-select-sm text-muted bg-transparent border-0">
43.                                               <option disabled selected></option>
44.                                               <option value="doing">DOING</option>
45.                                               <option value="done">DONE</option>
46.                                           </select>
47.                                       </form>
48.                                   </div>
49.                               </div>
50.                           </div>
51.                           {% endfor %}
52.                       </div>
53.                   </div>
54.               </div>
55.               <div class="col-sm-6 col-md-4 col-xl-3">
56.                   <div class="card bg-light">
57.                       <div class="card-body">
58.                           <h6 class="card-title text-uppercase text-center text-truncate py-2">Doing</h6>
59.                           {% for doing in doings %}
60.                           <div class="items mb-3">
61.                               <div class="card draggable shadow-sm" id="{{ doing.id }}" draggable="true">
62.                                   <div class="card-body p-2">
63.                                       <div class="card-title">
64.                                           <form action="{{ url_for('del_task') }}" method="POST">
65.                                               <input type="hidden" name="task_id" value="{{ doing.id }}" />
66.                                               <input type="submit"
67.                                                   class="close float-right text-danger bg-transparent border-0"
68.                                                   value="&times;" />
69.                                               <a href="/" class="lead font-weight-light">{{ doing.title }}</a>
70.                                           </form>
71.                                       </div>
72.                                       <p>{{ doing.content }}</p>
73.                                       <form action="{{ url_for('move_task') }}" method="POST">
74.                                           <input type="hidden" name="task_id" value="{{ doing.id }}" />
75.                                           <span class="text-muted">Move to:</span>
76.                                           <select name="panel" onchange="this.form.submit()"
77.                                               class="custom-select-sm text-muted bg-transparent border-0">
78.                                               <option disabled selected></option>
79.                                               <option value="todo">TO DO</option>
80.                                               <option value="done">DONE</option>
81.                                           </select>
82.                                       </form>
83.                                   </div>
84.                               </div>
85.                           </div>
86.                           {% endfor %}
87.                       </div>
88.                   </div>
89.               </div>
90.               <div class="col-sm-6 col-md-4 col-xl-3">
91.                   <div class="card bg-light">
92.                       <div class="card-body">
93.                           <h6 class="card-title text-uppercase text-center text-truncate py-2">Done</h6>
94.                           {% for done in dones %}
95.                           <div class="items mb-3">
96.                               <div class="card draggable shadow-sm" id="{{ done.id }}">
97.                                   <div class="card-body p-2">
98.                                       <div class="card-title">
99.                                           <form action="{{ url_for('del_task') }}" method="POST">
100.                                              <input type="hidden" name="task_id" value="{{ done.id }}" />
101.                                              <input type="submit"
102.                                                  class="close float-right text-danger bg-transparent border-0"
103.                                                  value="&times;" />
104.                                              <a href="/" class="lead font-weight-light">{{ done.title
105.                                                  }}</a>
106.                                          </form>
107.                                      </div>
108.                                      <p>{{ done.content }}</p>
109.                                      <form action="{{ url_for('move_task') }}" method="POST">
110.                                          <input type="hidden" name="task_id" value="{{ done.id }}" />
111.                                          <span class="text-muted">Move to:</span>
112.                                          <select name="panel" onchange="this.form.submit()"
113.                                              class="custom-select-sm text-muted bg-transparent border-0 box-shadow-none">
114.                                              <option disabled selected></option>
115.                                              <option value="todo">TO DO</option>
116.                                              <option value="doing">DOING</option>
117.                                          </select>
118.                                      </form>
119.                                  </div>
120.                              </div>
121.                          </div>
122.                          {% endfor %}
123.                      </div>
124.                  </div>
125.              </div>
126.              <!-- Modal -->
127.              <div class="modal fade" id="makeTask" role="dialog">
128.                  <div class="modal-dialog">
129.
130.                      <!-- Modal content-->
131.                      <div class="modal-content">
132.                          <form id="taskForm" class="form content" method="POST" action="{{ url_for('new_task') }}"
133.                              values="todo">
134.                              <div class="modal-header">
135.                                  <input type="text" class="modal-title border-0 form-control-lg shadow-none" name="title"
136.                                      placeholder="Task Title" />
137.                                  <input type="button" class="close float-right bg-transparent border-0"
138.                                      data-dismiss="modal" value="&times;" />
139.                              </div>
140.                              <div class="modal-body justify-content-between">
141.                                  <textarea rows="5" class="form-control shadow-none border-dark" name="content"
142.                                      placeholder="Task Description" maxlength="250"></textarea>
143.                                  <select name="panel" form="taskForm" class="pl-1 mt-3">
144.                                      <option value="todo">TO DO</option>
145.                                      <option value="doing">DOING</option>
146.                                      <option value="done">DONE</option>
147.                                  </select>
148.                              </div>
149.                              <div class="modal-footer">
150.                                  <input type="submit" class="btn btn-primary float-right align-bottom"
151.                                      value="Create Task" />
152.                              </div>
153.                          </form>
154.                      </div>
155.                  </div>
156.              </div>
157.          </div>
158.          <div class="row flex-row justify-content-benter">
159.              <div style="width:40%" class="align-content-center mt-2">
160.                  <form data-toggle="modal" data-target="#makeTask" method="dialog">
161.                      <input type="submit" style="width:100%" class="btn btn-primary btn-sm" value="New Task" />
162.                  </form>
163.              </div>
164.
165.          </div>
166.      </div>
167.  </div>
168. </body>
169.
170. </html>
```

```
# app.py

1.    #!/usr/bin/python
2.    #
3.    # CS162 Assignment 2 - Web Application
4.    # author: Austin Perzben
5.    # created: 2021-03-24 | 21:45:27
6.
7.    from flask import Flask, render_template, redirect, url_for, request
8.    from flask_sqlalchemy import SQLAlchemy
9.
10.   kanban = Flask(__name__)
11.
12.   kanban.config["SQLALCHEMY_DATABASE_URI"] = "sqlite:///kanban.db"
13.
14.   db = SQLAlchemy(kanban)
15.
16.
17.   class Task(db.Model):
18.       id = db.Column(db.Integer, primary_key=True)
19.       title = db.Column(db.String())
20.       content = db.Column(db.String(250))
21.       panel = db.Column(db.String())
22.
23.
24.   @kanban.route("/", methods=["GET", "POST"])
25.   def index():
26.       todos = Task.query.filter_by(panel='todo')
27.       doings = Task.query.filter_by(panel='doing')
28.       dones = Task.query.filter_by(panel='done')
29.       return render_template("index.html", todos=todos, doings=doings, dones=dones, task=None)
30.
31.
32.   @kanban.route("/new_task", methods=["GET", "POST"])
33.   def new_task():
34.       if request.method == "POST":
35.           task = Task(
36.               title=request.form['title'], content=request.form['content'], panel=request.form['panel'])
37.           db.session.add(task)
38.           db.session.commit()
39.
40.       return redirect(url_for('index'))
41.
42.
43.   @kanban.route("/del_task", methods=["POST"])
44.   def del_task():
45.       task_id = request.form['task_id']
46.       # print(task_id)
47.       task = Task.query.filter_by(id=task_id)
48.       task.delete()
49.       db.session.commit()
50.       return redirect(url_for('index'))
51.
52.
53.   @kanban.route("/move_task", methods=["POST"])
54.   def move_task():
55.       task_id = request.form['task_id']
56.       task = Task.query.filter_by(id=task_id).first_or_404()
57.       task.panel = request.form['panel']
58.       db.session.add(task)
59.       db.session.commit()
60.       print(task.panel)
61.
62.       return redirect(url_for('index'))
63.
64.   # @kanban.route("/edit_task/<task_id>", methods=["GET", "POST"])
65.   # def edit_task(task_id):
66.   #     task = Task.query.filter_by(id=task_id).first_or_404()
67.
68.   #     return redirect(url_for('index'),
69.   #                     task=task)
70.
71.
72.   @kanban.route("/notImplemented/<prev>", methods=["GET", "POST"])
73.   def notImplemented(prev):
74.       return f"<h1>Not Implemented!</h1><p>{prev}</p>"
75.
76.
77.   if __name__ == "__main__":
78.       kanban.run(debug=True)
```