Mini project Report for 18ECO109J(Embedded System Design Raspberry Pi)

Title - To do list using flask and SQL

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BACKGROUND and MOTIVATION

- Social media and other easily accessible online distractions make it hard for us to stay focused on our tasks and make it difficult for us to do our work efficiently.

- Also, constantly switching between tasks may give us the false feeling that we are being productive when we are, in fact, not. It's more important for us to prioritize tasks and work on those that are most important, rather than focusing on deleting small items from our todo list just for the sake of appearances.

KEY PROBLEMS SOLVED

- Manage time on tasks, then validate time spent.

- Make it easy for users to manage to-do lists, track time and set constraints in one place.

- Add the ability to easily add tasks and to search to-do lists.

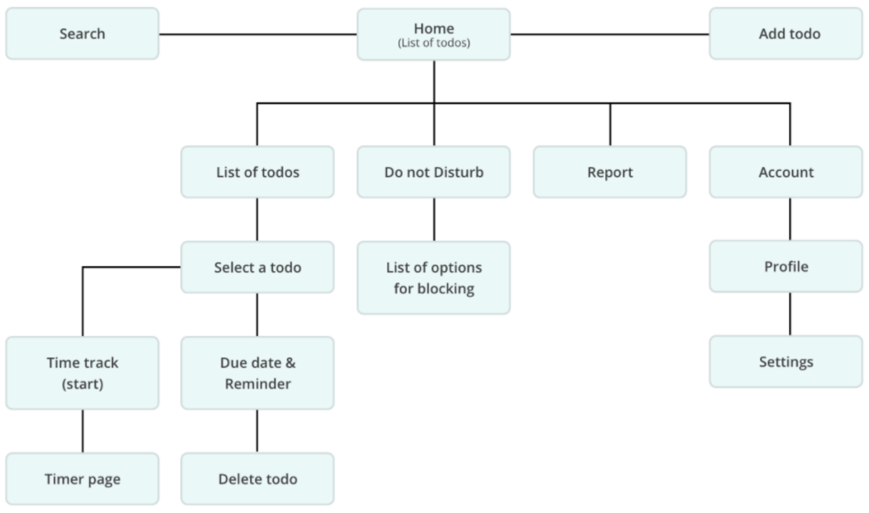
- Can easily add, delete and update tasks.

OBJECTIVE

- The goal of this app is to help us become more aware of how we spend time in the process of doing those tasks and how productive that time is.
- It can help set some constraints on social media to reduce distraction and track the time we spend working on the to-do items.

- When we have a better sense of the estimated time we'll need to spend on our tasks, along with the validated time spent on the items for reference or personal/team reviews, we are able to manage our daily routines more efficiently.
- We stay focussed and reminded of the numerous tasks that we have to complete.

Block Diagram:-

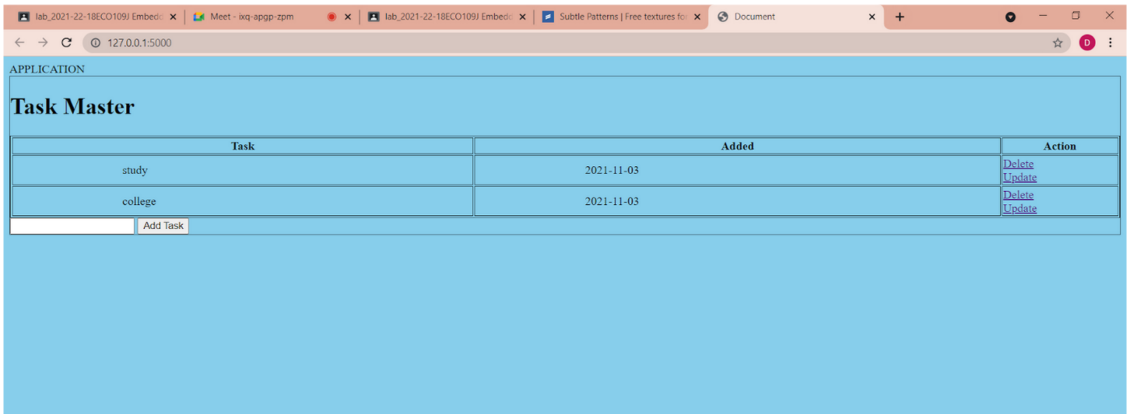


Program:-

```
from flask import Flask, request, redirect
from flask import render_template
from flask_sqlalchemy import SQLAlchemy
from datetime import datetime

app = Flask(__name__)
app.config['SQLALCHEMY_DATABASE_URI'] = 'sqlite:///test.db'
db = SQLAlchemy(app)


class Todo(db.Model):
    id = db.Column(db.Integer, primary_key=True)
    content = db.Column(db.String(200), nullable=False)
    completed = db.Column(db.Integer, default=0)
    date_created = db.Column(db.DateTime, default=datetime.utcnow)

    def __repr__(self):
        return '<Task %r>' % self.id


@app.route('/', methods=['POST', 'GET'])
def index():
    if request.method == 'POST':
        task_content = request.form['content']
        new_task = Todo(content=task_content)

        try:
            db.session.add(new_task)
            db.session.commit()
            return redirect('/')
        except:
            return "there was an error adding ur task"
    else:
        tasks = Todo.query.order_by(Todo.date_created).all()
        return render_template('index.html', tasks=tasks)


@app.route('/delete/<int:id>')
def delete(id):
    task_to_delete = Todo.query.get_or_404(id)

    try:
        db.session.delete(task_to_delete)
        db.session.commit()
        return redirect('/')
    except:
        return "there was a problem deleting that task"


@app.route('/update/<int:id>', methods=['GET', 'POST'])
def update(id):

    task = Todo.query.get_or_404(id)

    if request.method == 'POST':
        task.content = request.form['content']
        try:
            db.session.commit()
            return redirect('/')
        except:
            return "cant update the task"

    else:
        return render_template('update.html', task=task)
    return ""


if __name__ == "__main__":
    app.run(debug=True)
```

Results:

Add Task

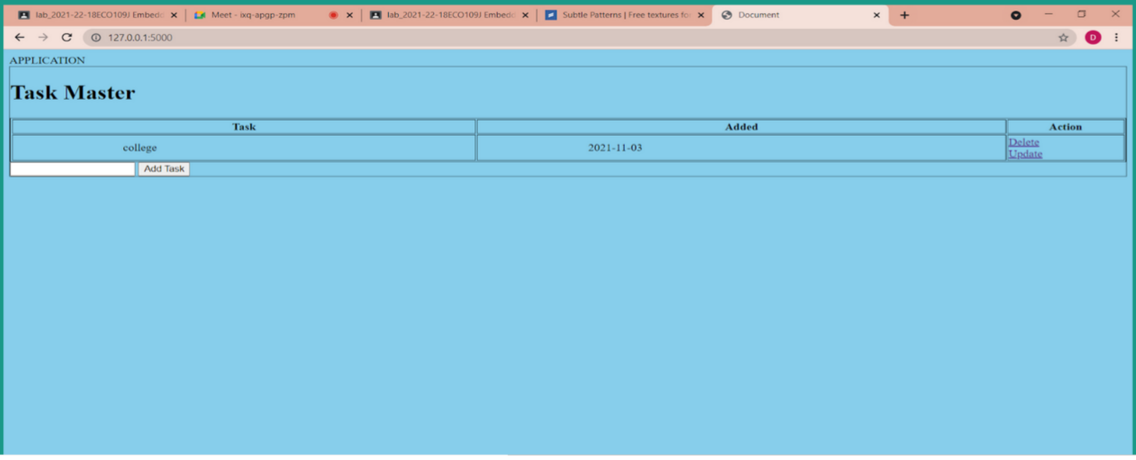


APPLICATION

Task Master

Task	Added	Action
study	2021-11-03	Delete Update
college	2021-11-03	Delete Update

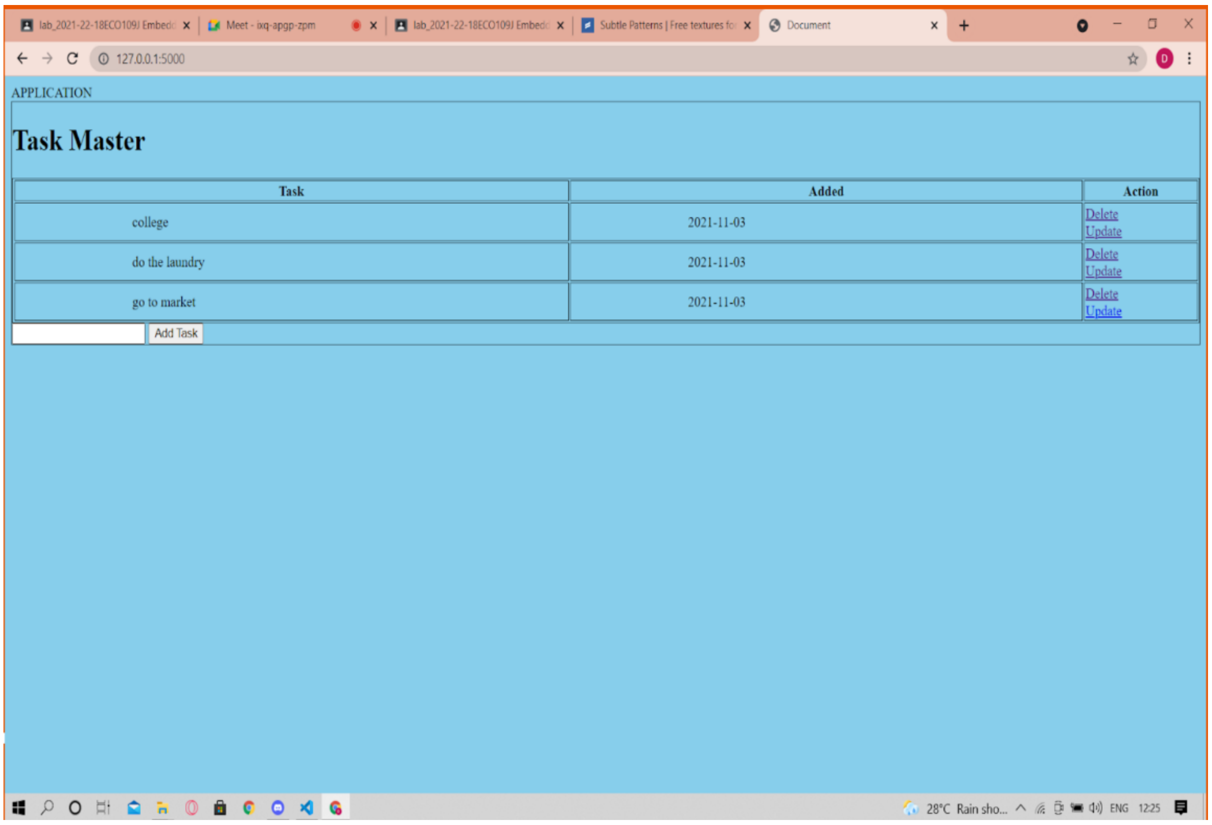
Delete Task



APPLICATION

Task Master

Task	Added	Action
college	2021-11-03	Delete Update


APPLICATION

Task Master

Task	Added	Action
college	2021-11-03	Delete Update
do the laundry	2021-11-03	Delete Update
go to market	2021-11-03	Delete Update

lab_2021-22-18ECO109J Embedd
Meet - ixq-apgp-zpm
lab_2021-22-18ECO109J Embedd
Subtle Patterns | Free textures for
Document
127.0.0.1:5000
Add Task
28°C Rain sho...
ENG
12:25