Task Buster: Your Trusted Companion for Organizing Your Life
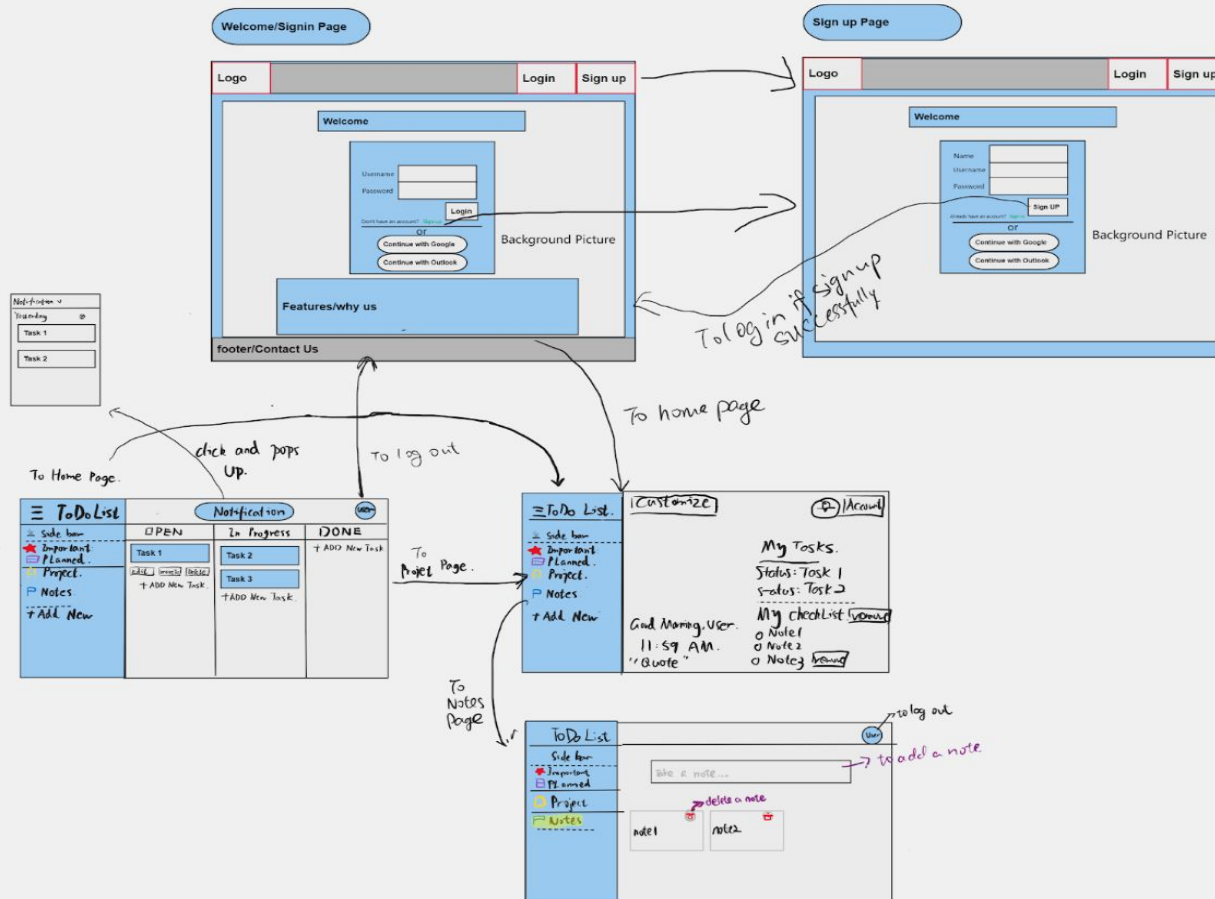
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idea/users

- Task Buster is a web-based project management tool that uses boards, lists, and cards to organize tasks and projects.
- is designed to help users keep track of their daily tasks and activities.
- users can benefit from the program whether they are students, professionals, or anyone who wants to improve their time management.
- users can easily manage their workload, stay on top of their tasks, and achieve their goals more effectively.

Prototype

Implementation-Front End

- **Front End**
  - JQuery
  - AJAX
  - Bootstrap 5
  - JS,HTML,CSS

Implementation BackEnd

- **Database Structure**

Tables (2)

note		CREATE TABLE note (id INTEGER NOT NUL
id	INTEGER	"id" INTEGER NOT NULL
content	TEXT	"content" TEXT NOT NULL
user_id	INTEGER	"user_id" INTEGER NOT NULL
users		CREATE TABLE users (id INTEGER NOT NU
id	INTEGER	"id" INTEGER NOT NULL
username	VARCHAR(50)	"username" VARCHAR(50) NOT NULL
email	VARCHAR(120)	"email" VARCHAR(120) NOT NULL
password	VARCHAR(120)	"password" VARCHAR(120) NOT NULL
todos		CREATE TABLE "todos" ("id" t
id	text	"id" text
title	TEXT	"title" TEXT NOT NULL
description	TEXT	"description" TEXT
status	TEXT	"status" TEXT
user_id	INTEGER	"user_id" INTEGER NOT NULL

- **Back End**
  - Flask
  - SqlAlchemy
  - Sqlite3


```
from flask import Flask, render_template, request, url_for, redirect, flash, session, json
from flask_sqlalchemy import SQLAlchemy
from flask_login import LoginManager, login_user, current_user, UserMixin, logout_user
from flask_wtf import FlaskForm
from wtforms import StringField, PasswordField, SubmitField
from wtforms.validators import DataRequired, Length, Email, EqualTo
from flask_wtf.csrf import CSRFProtect
from flask import make_response
import sqlite3
```

- **SQLAlchemy :** We use SQLALchemy to deal with backend data in this project. It is a Python library that provides an Object-Relational Mapping(ORM) system, which abstracts the backend database engine and allows you to work with your database tables as Python classes and objects. We choose SQLAlchemy for its flexible query API, data validation, and integration with web frameworks.

Usefulness in the real world

- **Helps with organization:** The system can help users organize their tasks and prioritize them based on their importance and urgency. This can help users stay focused and avoid getting overwhelmed.
- **Increases productivity:** Users can track their progress and ensure that they are making progress towards their goals. This can help increase the productivity and ensure that they are getting things done efficiently.
- **Improves time management:** A to-do list can help user manage their time better by allowing them to allocate time for specific tasks. This can help users make the most of their time and ensure that they are not wasting time on unimportant tasks.
- **Increases motivation:** Checking off tasks can provide a sense of accomplishment and motivation to keep going. This can help user stay on track and achieve their goals.