**­­­­­­­Menghubungkan Flask dengan Boostrap**

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|  | Pengenalan Boostrap dan Flask |
| Tujuan | 1. Memahami apa itu SQLite dan Flask |
| Pendahuluan | |  |  | | --- | --- | |  | Flask adalah kerangka kerja aplikasi web bersifat kerangka kerja mikro yang ditulis dalam bahasa pemrograman Python dan menggunakan dependensi Werkzeug dan Jinja2. |   Flask bisa digunakan untuk membuat website rumit yang berbasis database, memulai dengan membuat halaman statik berguna untuk memperkenalkan alur kerja, yang nantinya digunakan untuk membuat halaman lain yang lebih rumit.   Bootstrap adalah framework open-source khusus front end yang awalnya dibuat oleh Mark Otto dan Jacob Thornton untuk mempermudah dan mempercepat pengembangan web di front end.Bootstrap memiliki semua jenis HTML dan template desain berbasis CSS untuk berbagai fungsi dan komponen, seperti navigasi, sistem grid, carousel gambar, dan tombol (button).Framework ini memang menghemat waktu developer karena tidak perlu mengelola template berkali-kali. Namun, fungsi utama dari Bootstrap adalah untuk membuat situs yang responsif. Interface website akan bekerja secara optimal di semua ukuran layar baik di layar smartphone maupun layar komputer/laptop.  Raspberry pi adalah komputer seukuran kartu kredit yang mudah diprogram dan digunakan bahkan untuk orang yang tidak memiliki latar belakang TI. Meskipun ukurannya kecil, raspberry cukup memiliki daya yang cukup untuk menjalankan beberapa aplikasi sekaligus sama seperti di komputer, mulai dari aplikasi pengolah office sampai games.  SQLite adalah perpustakaan perangkat lunak yang menerapkan engine database SQL secara mandiri, tanpa memerlukan server, tanpa perlu melakukan konfigurasi, dan bersifat transaksional. SQLite adalah engine database SQL yang paling banyak digunakan di dunia. SQLite merupakan proyek yang bersifat public domain. SQLite adalah sebuah engine database SQL yang langsung tertanam atau pada aplikasi. Tidak seperti kebanyakan database SQL lainnya, SQLite tidak memiliki server yang terpisah dari aplikasi. SQLite membaca dan menulis langsung ke file disk biasa. SQLite telah didukung oleh banyak bahasa pemrograman seperti C, C ++, BASIC, C #, Python, Java dan Delphi.  sqlAlchemySQLAlchemy merupakan sekumpulan perangkat lunak dengan sumber terbuka untuk SQL dan Pemetaan Objek Relasional untuk bahasa pemrograman Python. Aplikasi ini dirilis dengan menggunakan Lisensi MIT.  SQLAlchemy berprinsip bahwa database relasional dapat dianggap seperti sekumpulan objek karena skalanya yang semakin besar. Selain itu kinerja dari sebuah database juga mulai menjadi perhatian. Atas alasan ini maka [pola pemetaan data](https://id.wikipedia.org/w/index.php?title=Pola_data_mapper&action=edit&redlink=1) (seperti [Hibernate](https://id.wikipedia.org/w/index.php?title=Hibernasi_(Jawa)&action=edit&redlink=1) pada bahasa [Java](https://id.wikipedia.org/wiki/Java)) kemudian menjadi pilihan untuk diadopsi ke dalam SQLAlchemy.  session session merupakan data yang disimpan dalam suatu server yang dapat digunakan secara global di server tersebut, dimana data tersebut spesifik merujuk ke user/client tertentu, contoh penggunaan session adalah ketika user telah login di halaman tertentu, maka ketika membuka halaman lain, php akan mengingat bahwa user tersebut telah login, contoh ketika kita telah login pada Google, maka setiap kali kita membuka layanan Google seperti GMail, Google Drive, dll di tab berbeda, kita akan selalu dalam keadaan login, kecuali kita buka dengan browser yang berbeda. Cntoh lain ketika web ecommerce merekam keranjang belanja user, maka ketika pindah ke halaman pembayaran, daftar belanja masih terekam.  REST API Definition: What is a REST API (RESTful API)?API adalah singkatan dari Application Programming Interface. API sendiri merupakan interface yang dapat menghubungkan satu aplikasi dengan aplikasi lainnya.Dengan kata lain, peran API adalah sebagai perantara antar berbagai aplikasi berbeda, baik dalam satu platform yang sama atau pun lintas platform. |

**Tahap Instalasi database,api dan flask**

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|  | Langkah Pengerjaan |
|  | 1. Download DB Browser for SQLite <https://sqlitebrowser.org/dl/>   Pilih DB Browser for SQLite - Standard installer for 64-bit Windows.     1. Jika sudah, hasil download nya akan seperti ini      1. Halaman awal ketika dibuka akan seperti ini 2. Selanjutnya akan masuk ke halaman End-User License Agreement, lalu centang I accept the terms in the License Agreement 3. Setelah di klik akan tampil halaman Shortcuts, ini untuk memilih ikon dari SQLite ditampilkan di desktop atau hanya di file explore.   Jika ingin tampil Desktop bisa di centang pilihan Desktop   1. Selanjutnya klik next, dan tunggu sampai proses selesai 2. Bila sudah klik Finish      1. Tampilan DB Browser for SQLite akan seperti dibawah ini      1. Setelah itu buka terminal/ command prompt dan install library sqlAlchemy seperti dibawah      1. Selanjutnya install juga library Flask seperti dibawah      1. Setelah itu install library FlaskSqlAchemy      1. Buka website newsapi.org      1. Setelah itu register      1. Setelah itu anda akan mendaptakan api key yang anda butuhkan |

**setting flask dengan adminlte**

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|  | Download adminLte disini <https://github.com/ColorlibHQ/AdminLTE/archive/refs/tags/v3.1.0.zip> |
|  | Jika sudah, hasil download nya akan seperti ini |
|  | Setelah itu ektrak adminLte maka hasilnya akan seperti dibawah |
|  | Setelah diekstak copy folder build, dist, plugins ke folder static kalian |
|  | Setelah itu copy file index.html dari adminLte ke folder templates kalian dan ubah namanya menjadi base.html |
|  | Setelah itu edit file base.html sesuai dengan ketentuan seperti sebelumnya dengan mengubah directory librarynya menjadi isi dari folder static |
|  | Setelah itu berikan block content untuk isi dari conten nantinya |
|  | Setelah itu berikan block title untuk title dari conten nantinya |
|  | Untuk selengkapnya bisa copy kode dibawah  <!DOCTYPE html>  <html lang="en">  <head>    <meta charset="utf-8">    <meta name="viewport" content="width=device-width, initial-scale=1">    <title>Smart | MIRROR</title>    <!-- Google Font: Source Sans Pro -->    <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Source+Sans+Pro:300,400,400i,700&display=fallback">    <!-- Font Awesome -->    <link rel="stylesheet" href="../static/plugins/fontawesome-free/css/all.min.css">    <!-- Ionicons -->    <link rel="stylesheet" href="https://code.ionicframework.com/ionicons/2.0.1/css/ionicons.min.css">    <!-- Tempusdominus Bootstrap 4 -->    <link rel="stylesheet" href="../static/plugins/tempusdominus-bootstrap-4/css/tempusdominus-bootstrap-4.min.css">    <!-- iCheck -->    <link rel="stylesheet" href="../static/plugins/icheck-bootstrap/icheck-bootstrap.min.css">    <!-- JQVMap -->    <link rel="stylesheet" href="../static/plugins/jqvmap/jqvmap.min.css">    <!-- Theme style -->    <link rel="stylesheet" href="../static/dist/css/adminlte.min.css">    <!-- overlayScrollbars -->    <link rel="stylesheet" href="../static/plugins/overlayScrollbars/css/OverlayScrollbars.min.css">    <!-- Daterange picker -->    <link rel="stylesheet" href="../static/plugins/daterangepicker/daterangepicker.css">    <!-- summernote -->    <link rel="stylesheet" href="../static/plugins/summernote/summernote-bs4.min.css">    <script src='https://cdn.jsdelivr.net/npm/chart.js@3.7.0/dist/chart.min.js'></script>  </head>  <body class="hold-transition sidebar-mini layout-fixed">  <div class="wrapper">    <!-- Navbar -->    <nav class="main-header navbar navbar-expand navbar-white navbar-light">      <!-- Left navbar links -->      <ul class="navbar-nav">        <li class="nav-item">          <a class="nav-link" data-widget="pushmenu" href="#" role="button"><i class="fas fa-bars"></i></a>        </li>        <li class="nav-item d-none d-sm-inline-block">          <a href="/index" class="nav-link">Home</a>        </li>        <li class="nav-item d-none d-sm-inline-block">          <a href="/formTask" class="nav-link">Task</a>        </li>        <li class="nav-item d-none d-sm-inline-block">          <a href="/formUpload" class="nav-link">Music</a>        </li>        <li class="nav-item d-none d-sm-inline-block">          <a href="/home" class="nav-link">Smart Mirror</a>        </li>      </ul>      <!-- Right navbar links -->      <ul class="navbar-nav ml-auto">        <!-- Messages Dropdown Menu -->        <!-- Notifications Dropdown Menu -->        <li class="nav-item">          <a class="nav-link" data-widget="fullscreen" href="#" role="button">            <i class="fas fa-expand-arrows-alt"></i>          </a>        </li>        <li class="nav-item dropdown">          <a class="nav-link" data-toggle="dropdown" href="#">            <i class="far fa-user"></i>          </a>          <div class="dropdown-menu dropdown-menu-lg dropdown-menu-right">            <span class="dropdown-item dropdown-header">{{ session.username }}</span>            <div class="dropdown-divider"></div>            <a href="/logout" class="dropdown-item">              <i class="fas fa-lock"></i> Log out            </a>              </div>        </li>      </ul>    </nav>    <!-- /.navbar -->    <!-- Main Sidebar Container -->    <aside class="main-sidebar sidebar-dark-primary elevation-4">      <!-- Brand Logo -->      <a href="/" class="brand-link">        <span class="brand-text font-weight-light">Smart MIRROR</span>      </a>      <!-- Sidebar -->      <div class="sidebar">        <!-- Sidebar user panel (optional) -->        <div class="user-panel mt-3 pb-3 mb-3 d-flex">          <div class="image">            <img src="../static/dist/img/user2-160x160.jpg" class="img-circle elevation-2" alt="User Image">          </div>          <div class="info">            <a href="#" class="d-block">{{ session.username }}</a>          </div>        </div>        <!-- SidebarSearch Form -->        <div class="form-inline">          <div class="input-group" data-widget="sidebar-search">            <input class="form-control form-control-sidebar" type="search" placeholder="Search" aria-label="Search">            <div class="input-group-append">              <button class="btn btn-sidebar">                <i class="fas fa-search fa-fw"></i>              </button>            </div>          </div>        </div>        <!-- Sidebar Menu -->        <nav class="mt-2">          <ul class="nav nav-pills nav-sidebar flex-column" data-widget="treeview" role="menu" data-accordion="false">            <!-- Add icons to the links using the .nav-icon class                 with font-awesome or any other icon font library -->            <li class="nav-item">              <a href="/index" class="nav-link active">                <i class="nav-icon fas fa-tachometer-alt"></i>                <p>                  Dashboard                  <i class="right fas"></i>                </p>              </a>              </li>              <li class="nav-item">                <a href="/formTask" class="nav-link">                  <i class="nav-icon fas fa-th-list"></i>                  <p>                    Task                    <i class="right fas"></i>                  </p>                </a>                </li>              <li class="nav-item">                <a href="/formUpload" class="nav-link">                  <i class="nav-icon fas fa-music"></i>                  <p>                    Music                    <i class="right fas"></i>                  </p>                </a>                </li>              <li class="nav-item">                <a href="/home" class="nav-link">                  <i class="nav-icon fas fa-window-restore"></i>                  <p>                    Mirror                    <i class="right fas"></i>                  </p>                </a>                </li>            </ul>        </nav>        <!-- /.sidebar-menu -->      </div>      <!-- /.sidebar -->    </aside>    <!-- Content Wrapper. Contains page content -->    <div class="content-wrapper">      <!-- Content Header (Page header) -->      <div class="content-header">        <div class="container-fluid">          <div class="row mb-2">            <div class="col-sm-6">              <h1 class="m-0">{% block title %} {% endblock %}</h1>            </div><!-- /.col -->            <div class="col-sm-6">              <ol class="breadcrumb float-sm-right">                <li class="breadcrumb-item"><a href="#"></a></li>                <li class="breadcrumb-item active"></li>              </ol>            </div><!-- /.col -->          </div><!-- /.row -->        </div><!-- /.container-fluid -->      </div>      <!-- /.content-header -->      <!-- Main content -->      <section class="content">        <div class="container-fluid">          <!-- Small boxes (Stat box) -->          <div class="row">            {% block content %} {% endblock %}          </div>          <!-- /.row (main row) -->        </div><!-- /.container-fluid -->      </section>      <!-- /.content -->    </div>    <!-- /.content-wrapper -->    <footer class="main-footer">      <strong>Copyright &copy; 2014-2021 <a href="https://adminlte.io">AdminLTE.io</a>.</strong>      All rights reserved.      <div class="float-right d-none d-sm-inline-block">        <b>Version</b> 3.1.0      </div>    </footer>    <!-- Control Sidebar -->    <aside class="control-sidebar control-sidebar-dark">      <!-- Control sidebar content goes here -->    </aside>    <!-- /.control-sidebar -->  </div>  <!-- ./wrapper -->  <script src="../static/plugins/bs-custom-file-input/bs-custom-file-input.min.js"></script>  <!-- jQuery -->  <script src="../static/plugins/jquery/jquery.min.js"></script>  <!-- jQuery UI 1.11.4 -->  <script src="../static/plugins/jquery-ui/jquery-ui.min.js"></script>  <!-- Resolve conflict in jQuery UI tooltip with Bootstrap tooltip -->  <script>    $.widget.bridge('uibutton', $.ui.button)  </script>  <!-- Bootstrap 4 -->  <script src="../static/plugins/bootstrap/js/bootstrap.bundle.min.js"></script>  <!-- ChartJS -->  <script src="../static/plugins/chart.js/Chart.min.js"></script>  <!-- Sparkline -->  <script src="../static/plugins/sparklines/sparkline.js"></script>  <!-- JQVMap -->  <script src="../static/plugins/jqvmap/jquery.vmap.min.js"></script>  <script src="../static/plugins/jqvmap/maps/jquery.vmap.usa.js"></script>  <!-- jQuery Knob Chart -->  <script src="../static/plugins/jquery-knob/jquery.knob.min.js"></script>  <!-- daterangepicker -->  <script src="../static/plugins/moment/moment.min.js"></script>  <script src="../static/plugins/daterangepicker/daterangepicker.js"></script>  <!-- Tempusdominus Bootstrap 4 -->  <script src="../static/plugins/tempusdominus-bootstrap-4/js/tempusdominus-bootstrap-4.min.js"></script>  <!-- Summernote -->  <script src="../static/plugins/summernote/summernote-bs4.min.js"></script>  <!-- overlayScrollbars -->  <script src="../static/plugins/overlayScrollbars/js/jquery.overlayScrollbars.min.js"></script>  <!-- AdminLTE App -->  <script src="../static/dist/js/adminlte.js"></script>  <!-- AdminLTE for demo purposes -->  <script src="../static/dist/js/demo.js"></script>  <!-- AdminLTE dashboard demo (This is only for demo purposes) -->  <script src="../static/dist/js/pages/dashboard.js"></script>  </body>  </html> |

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|  | Setelah buat file formTask.html untuk file formTask tidak perlu menuliskan lagi kode sebelumnya kita hanya perlu mengextends file base.html dan mengisi block content sepertid dibawah  {% extends 'base.html' %}  {% block title %} Dashboard{% endblock %}  {% block content %}  <div class="col-md-6">  <div class="card card-primary">      <div class="card-header">        <h3 class="card-title">Task</h3>      </div>            <!-- form start -->            <form action="/prosesTask" method="post">              <div class="card-body">                <div class="form-group">                  <label>Task</label>                  <input type="text" class="form-control" name="coba">                </div>              </div>              <!-- /.card-body -->              <div class="card-footer">                <button type="submit" class="btn btn-primary">Add</button>              </div>            </form>      </div>      </div>      <div class="col-md-6">          <div class="card">            <div class="card-header">              <h3 class="card-title">Bordered Table</h3>            </div>            <!-- /.card-header -->            <div class="card-body">              <table class="table table-bordered">                <thead>                  <tr>                    <th style="width: 10px">#</th>                    <th>Task</th>                    </tr>                </thead>                <tbody>                  {% for coba in coba %}                  <tr>                    <td>{{ coba['id'] }}</td>                    <td>{{ coba['task'] }}</td>                    <td><a href="{{ url\_for('deleteTask', id=coba.id) }}">delete</a></td>                  </tr>                  {% endfor %}                </tbody>              </table>            </div>            <!-- /.card-body -->            <div class="card-footer clearfix">              </ul>            </div>          </div>          <!-- /.card -->      </div>  {% endblock %} |
|  | Setelah buat file formUpload.html untuk formUpload file ini tidak perlu menuliskan lagi kode sebelumnya kita hanya perlu mengextends file index.html dan mengisi block chart sepertid dibawah  {% extends 'base.html' %}  {% block title %} Dashboard{% endblock %}  {% block content %}  <div class="col-md-6">  <div class="card card-primary">      <div class="card-header">        <h3 class="card-title">Task</h3>      </div>      <div class="card-body">      <form action="/upload" enctype="multipart/form-data" method="post">      <div class="form-group">        <label for="exampleInputFile">File input</label>        <div class="input-group">              <input type="file" name="file">          </div>      </div>      <!-- /.card-header -->      <!-- form start -->            <!-- /.card-header -->          <input type="submit" name="" value="Simpan Music">      </form>      </div>      </div>      </div>      <div class="col-md-6">        <div class="card">          <div class="card-header">            <h3 class="card-title">Music List</h3>          </div>          <!-- /.card-header -->          <div class="card-body">            <table class="table table-bordered">              <thead>                <tr>                  <th style="width: 10px">#</th>                  <th>Task</th>                  </tr>              </thead>              <tbody>                {% for coba in coba %}                <tr>                  <td>{{ coba['id'] }}</td>                  <td>{{ coba['name'] }}</td>                </tr>                <td><a href="{{ url\_for('deleteMusic', id=coba.id) }}">delete</a></td>                {% endfor %}              </tbody>            </table>          </div>          <!-- /.card-body -->          <div class="card-footer clearfix">            </ul>          </div>        </div>        <!-- /.card -->    </div>  {% endblock %} |
|  | Setelah buat file layout.html untuk layout dari file home.html  <!DOCTYPE html>  <html>  <head>      <title>Smart Mirror</title>    <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Source+Sans+Pro:300,400,400i,700&display=fallback">    <!-- Font Awesome -->    <link rel="stylesheet" href="../static/plugins/fontawesome-free/css/all.min.css">    <!-- Ionicons -->    <link rel="stylesheet" href="https://code.ionicframework.com/ionicons/2.0.1/css/ionicons.min.css">    <!-- Tempusdominus Bootstrap 4 -->    <link rel="stylesheet" href="../static/plugins/tempusdominus-bootstrap-4/css/tempusdominus-bootstrap-4.min.css">    <!-- iCheck -->    <link rel="stylesheet" href="../static/plugins/icheck-bootstrap/icheck-bootstrap.min.css">    <!-- JQVMap -->    <link rel="stylesheet" href="../static/plugins/jqvmap/jqvmap.min.css">    <!-- Theme style -->    <link rel="stylesheet" href="../static/dist/css/adminlte.min.css">    <!-- overlayScrollbars -->    <link rel="stylesheet" href="../static/plugins/overlayScrollbars/css/OverlayScrollbars.min.css">    <!-- Daterange picker -->    <link rel="stylesheet" href="../static/plugins/daterangepicker/daterangepicker.css">    <!-- summernote -->    <link rel="stylesheet" href="../static/plugins/summernote/summernote-bs4.min.css">    <script src='https://cdn.jsdelivr.net/npm/chart.js@3.7.0/dist/chart.min.js'></script>    <link rel= "stylesheet" type= "text/css" href= "{{ url\_for('static',filename='styles/main.css') }}">    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>    <script src="https://cdnjs.cloudflare.com/ajax/libs/socket.io/1.4.5/socket.io.min.js"></script>    <!-- Widget imports -->    <script type="text/javascript" src="{{ url\_for('static', filename = 'js/time.js') }}"></script>    <script type="text/javascript" src="{{ url\_for('static', filename = 'js/weather.js') }}"></script>    <script type="module" src="{{ url\_for('static', filename = 'js/listener.js') }}"></script>      </head>  <body>    {% block content %}{% endblock %}    </body>  <script src="../static/plugins/jquery/jquery.min.js"></script>    <!-- jQuery UI 1.11.4 -->    <script src="../static/plugins/jquery-ui/jquery-ui.min.js"></script>    <!-- Resolve conflict in jQuery UI tooltip with Bootstrap tooltip -->  <script>    $.widget.bridge('uibutton', $.ui.button)    </script>    <!-- Bootstrap 4 -->    <script src="../static/plugins/bootstrap/js/bootstrap.bundle.min.js"></script>    <!-- ChartJS -->    <script src="../static/plugins/chart.js/Chart.min.js"></script>    <!-- Sparkline -->    <script src="../static/plugins/sparklines/sparkline.js"></script>    <!-- JQVMap -->    <script src="../static/plugins/jqvmap/jquery.vmap.min.js"></script>    <script src="../static/plugins/jqvmap/maps/jquery.vmap.usa.js"></script>    <!-- jQuery Knob Chart -->    <script src="../static/plugins/jquery-knob/jquery.knob.min.js"></script>    <!-- daterangepicker -->    <script src="../static/plugins/moment/moment.min.js"></script>    <script src="../static/plugins/daterangepicker/daterangepicker.js"></script>    <!-- Tempusdominus Bootstrap 4 -->    <script src="../static/plugins/tempusdominus-bootstrap-4/js/tempusdominus-bootstrap-4.min.js"></script>    <!-- Summernote -->    <script src="../static/plugins/summernote/summernote-bs4.min.js"></script>    <!-- overlayScrollbars -->    <script src="../static/plugins/overlayScrollbars/js/jquery.overlayScrollbars.min.js"></script>    <!-- AdminLTE App -->    <script src="../static/dist/js/adminlte.js"></script>    <!-- AdminLTE for demo purposes -->    <script src="../static/dist/js/demo.js"></script>    <!-- AdminLTE dashboard demo (This is only for demo purposes) -->    <script src="../static/dist/js/pages/dashboard.js"></script>  </html> |
|  | Setelah buat file home.html untuk file ini tidak perlu menuliskan lagi kode sebelumnya kita hanya perlu mengextends file layout.html dan mengisi block chart sepertid dibawah  {% extends "layout.html" %}  {% block content %}      <div class='home-container'>          <div class='mirror-top-container'>              <div class='weather-top-container'>                  <div class='upper-weather-container'>                      <div class='weather-current-temp'></div>                      <div class='weather-current-icon'><img src="" id='weather-current-img'></div>                  </div>                  <div class='weather-current-title'></div>                  <div class='weather-current-desc'></div>              </div>              <div class='time-top-container' id='time-top-container'>                  <div class='time-top' id='time-top'></div>                  <div class='time-mid' id='time-mid'></div>                  <div class='time-bottom' id='time-bottom'></div>              </div>          </div>          <div class='mirror-sides-container' id='widget-content'>              <div class='news-right-container'>                    <div class="col-md-4">                      <div class="card shadow-none">                          <div class="card-header bg-black">                              <h3 class="card-title">Task Today</h3>                                <div class="card-tools">                                  <button type="button" class="btn btn-tool" data-card-widget="collapse">                                      <i class="fas fa-minus"></i>                                  </button>                              </div>                              <!-- /.card-tools -->                          </div>                          <!-- /.card-header -->                          <div class="card-body bg-black">                              <table class="table mb-1">                                  {% for coba in coba %}                                  <tr>                                      <td scope="row">{{ coba['id'] }}</th>                                      <td>{{ coba['task'] }}</td>                                      <td><a href="#!" data-mdb-toggle="tooltip" title="Done"><i class="fas fa-check text-white"></i></a>                                  </a></td>                                  </tr>                                  {% endfor %}                              </table>                          </div>                          <!-- /.card-body -->                      </div>                      <!-- /.card -->                  </div>            </div>              <div class='time-top-container' id='time-top-container'>                              <div id="carouselExampleSlidesOnly" class="carousel slide" data-ride="carousel">                              <div class="carousel-inner">                                  <div class="carousel-item active">                                  NEWS                                </div>                                {% for title,desc,img,p\_date in contents %}                                <div class="carousel-item">                                  <img class="d-block w-100" src="{{img}}" alt="Second slide">                                  <h5>{{title}}</h5>                                    </div>                                {% endfor %}                                </div>                            </div>                </div>          </div>        </div>        <audio controls autoplay id="au" hidden>            <source src="../static/music/MaryClare.mp3" type="audio/mpeg" >        </audio>        <script>          var c=0;/\*from w  w  w  . j a va  2s  .  c o  m\*/          var songs = {{url | safe}};          var a=document.getElementById("au");          a.addEventListener('ended', function(){            document.getElementById("au").src=songs[c];            a.load();            console.log(c);            c++;            if(c>=songs.length){                c=0;            }          });                  </script>  {% endblock content %} |
|  | Setelah itu buat file login.html untuk membuat form login setelah itu ketikan code dibawah ini   |  | | --- | | <!DOCTYPE html>  <html lang="en">  <head>    <meta charset="utf-8">    <meta name="viewport" content="width=device-width, initial-scale=1">    <title>Smart HOME | Log in</title>    <!-- Google Font: Source Sans Pro -->    <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Source+Sans+Pro:300,400,400i,700&display=fallback">    <!-- Font Awesome -->    <link rel="stylesheet" href="../static/plugins/fontawesome-free/css/all.min.css">    <!-- icheck bootstrap -->    <link rel="stylesheet" href="../static/plugins/icheck-bootstrap/icheck-bootstrap.min.css">    <!-- Theme style -->    <link rel="stylesheet" href="../static/dist/css/adminlte.min.css">  </head>  <body class="hold-transition login-page">  <div class="login-box">    <div class="login-logo">      <a href="/"><b>Smart</b>HOME</a>    </div>    <!-- /.login-logo -->    <div class="card">      <div class="card-body login-card-body">        <p class="login-box-msg">Sign in to start your session</p>        <form action="/loginProses" method="post">          <div class="input-group mb-3">            <input type="email" class="form-control" placeholder="Email" name="email">            <div class="input-group-append">              <div class="input-group-text">                <span class="fas fa-envelope"></span>              </div>            </div>          </div>          <div class="input-group mb-3">            <input type="password" class="form-control" placeholder="Password" name="password">            <div class="input-group-append">              <div class="input-group-text">                <span class="fas fa-lock"></span>              </div>            </div>          </div>          <div class="row">            <div class="col-8">              <div class="icheck-primary">                <input type="checkbox" id="remember" name="remember" value="remember">                <label for="remember">                 Remember                </label>              </div>            </div>            <!-- /.col -->            <div class="col-4">              <button type="submit" class="btn btn-primary btn-block">Sign In</button>            </div>            <!-- /.col -->          </div>        </form>        <p class="mb-1">          <a href="forgot-password.html">I forgot my password</a>        </p>        <p class="mb-0">          <a href="/register" class="text-center">Register a new membership</a>        </p>      </div>      <!-- /.login-card-body -->    </div>  </div>  <!-- /.login-box -->  <!-- jQuery -->  <script src="../static/plugins/jquery/jquery.min.js"></script>  <!-- Bootstrap 4 -->  <script src="../static/plugins/bootstrap/js/bootstrap.bundle.min.js"></script>  <!-- AdminLTE App -->  <script src="../static/dist/js/adminlte.min.js"></script>  </body>  </html> | |
|  | Setelah itu buat file register.html untuk membuat form login setelah itu ketikan code dibawah ini   |  | | --- | | <!DOCTYPE html>  <html lang="en">  <head>    <meta charset="utf-8">    <meta name="viewport" content="width=device-width, initial-scale=1">    <title>Smart HOME | Registration Page</title>    <!-- Google Font: Source Sans Pro -->    <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Source+Sans+Pro:300,400,400i,700&display=fallback">    <!-- Font Awesome -->    <link rel="stylesheet" href="../static/plugins/fontawesome-free/css/all.min.css">    <!-- icheck bootstrap -->    <link rel="stylesheet" href="../static/plugins/icheck-bootstrap/icheck-bootstrap.min.css">    <!-- Theme style -->    <link rel="stylesheet" href="../static/dist/css/adminlte.min.css">  </head>  <body class="hold-transition register-page">  <div class="register-box">    <div class="register-logo">      <a href="/login""><b>Smart</b>HOME</a>    </div>    <div class="card">      <div class="card-body register-card-body">        <p class="login-box-msg">Register a new membership</p>        <form action="/registerProses" method="post">          <div class="input-group mb-3">            <input type="text" class="form-control" placeholder="Full name" name="name">            <div class="input-group-append">              <div class="input-group-text">                <span class="fas fa-user"></span>              </div>            </div>          </div>          <div class="input-group mb-3">            <input type="email" class="form-control" placeholder="Email" name="email">            <div class="input-group-append">              <div class="input-group-text">                <span class="fas fa-envelope"></span>              </div>            </div>          </div>          <div class="input-group mb-3">            <input type="password" class="form-control" placeholder="Password" name="password">            <div class="input-group-append">              <div class="input-group-text">                <span class="fas fa-lock"></span>              </div>            </div>          </div>          <div class="row">            <div class="col-8">            </div>            <!-- /.col -->            <div class="col-4">              <button type="submit" class="btn btn-primary btn-block">Register</button>            </div>            <!-- /.col -->          </div>        </form>          <a href="/login" class="text-center">I already have a membership</a>      </div>      <!-- /.form-box -->    </div><!-- /.card -->  </div>  <!-- /.register-box -->  <!-- jQuery -->  <script src="../static/plugins/jquery/jquery.min.js"></script>  <!-- Bootstrap 4 -->  <script src="../static/plugins/bootstrap/js/bootstrap.bundle.min.js"></script>  <!-- AdminLTE App -->  <script src="../static/dist/js/adminlte.min.js"></script>  </body>  </html> | |
|  | Setelah itu kembali dan buat home.py untuk isi home.py seperti yang ada dibawah  from unicodedata import name  from flask import Flask, render\_template, jsonify, request,flash, session, redirect, url\_for  from flask\_socketio import SocketIO, send  from flask\_sqlalchemy import SQLAlchemy  from scripts.weather import get\_weather  from scripts.CommandHandler import CommandHandler  from newsapi import NewsApiClient  from scripts.asisstant import Take\_query  from werkzeug.utils import secure\_filename  import os  #from scripts.widgets.NewsWidget import getnews  #from scripts.agent.classes.Listener import Listener  import datetime, requests, time  UPLOAD\_FOLDER = '.\static\music'  ALLOWED\_EXTENSIONS = {'mp3'}  app = Flask(\_\_name\_\_)  app.config['SECRET\_KEY'] = 'mysecret'  app.config['SQLALCHEMY\_DATABASE\_URI'] = 'sqlite:///coba.sqlite3'  app.config['SECRET\_KEY'] = "random string"  app.config['UPLOAD\_FOLDER'] = UPLOAD\_FOLDER  db = SQLAlchemy(app)    socketio = SocketIO(app)  # Initialize socket api  thread = None  # Thread variable for listener  class User(db.Model):      id = db.Column(db.Integer, primary\_key=True)      email = db.Column(db.String(100), unique=True)      password = db.Column(db.String(100))      name = db.Column(db.String(1000))  class tasks(db.Model):      id = db.Column(db.Integer, primary\_key=True)      task = db.Column(db.String(100))      def \_\_repr\_\_(self):          return f"tasks('{self.task}',)"  class music(db.Model):      id = db.Column(db.Integer, primary\_key=True)      name = db.Column(db.String(100))      place = db.Column(db.String(100))        def \_\_repr\_\_(self):          return f"tasks('{self.music}',)"  db.create\_all()  # Run the voice recording listener  # listener = Listener(name="mirror mirror")  # listener.run()  command\_handler = CommandHandler()  # Create command handler object for listener  @app.route("/")  def formLogin():      return render\_template('login.html')  @app.route("/home")  def home():      '''      Main directory for smart mirror display      '''      api\_key = 'bfa5fdb278474bb789ee060fdbb187f4'      newsapi = NewsApiClient(api\_key=api\_key)      top\_headlines = newsapi.get\_top\_headlines(sources = "bbc-news")      t\_articles = top\_headlines['articles']      news = []      desc = []      img = []      p\_date = []      for i in range (len(t\_articles)):          main\_article = t\_articles[i]          news.append(main\_article['title'])          desc.append(main\_article['description'])          img.append(main\_article['urlToImage'])          p\_date.append(main\_article['publishedAt'])            contents = zip( news,desc,img,p\_date)        coba = tasks.query.limit(4).all()      ms=music.query.all()      url=[]      for amounts in ms:          url.append(amounts.place)        return render\_template('home.html',contents=contents,coba=coba,url=url)    def allowed\_file(filename):      return '.' in filename and \             filename.rsplit('.', 1)[1].lower() in ALLOWED\_EXTENSIONS  @app.route('/upload', methods=['GET', 'POST'])  def upload\_file():      file = request.files['file']      filename = secure\_filename(file.filename)      file.save(os.path.join(app.config['UPLOAD\_FOLDER'], filename))      new\_task = music(place='.'+os.path.join(app.config['UPLOAD\_FOLDER'], filename),name=filename)      db.session.add(new\_task)      db.session.commit()      return redirect(url\_for('formUpload'))    @app.route("/coba")  def newsCoba():      api\_key = '25560f3cf53c433c9807c60595b373a6'      newsapi = NewsApiClient(api\_key=api\_key)      top\_headlines = newsapi.get\_top\_headlines(sources = "bbc-news")      t\_articles = top\_headlines['articles']      news = []      desc = []      img = []      p\_date = []      for i in range (len(t\_articles)):          main\_article = t\_articles[i]          news.append(main\_article['title'])          desc.append(main\_article['description'])          img.append(main\_article['urlToImage'])          p\_date.append(main\_article['publishedAt'])            contents = zip( news,desc,img,p\_date)        return render\_template('home.html',contents=contents)  @app.route("/update\_weather", methods=['POST'])  def update\_weather():      '''      Returns updated weather, called every 10 minutes      '''      currentWeather = get\_weather()      return jsonify({'result' : 'success', 'currentWeather' : currentWeather})  @app.route("/update\_widget", methods=['POST'])  def update\_widget():      '''      Returns the widget data from the assistant      '''      json = getnews()      return jsonify({'result' : 'success', 'json' : json, 'widget' : 'news'})    # Listen for changes to the command  # def command\_listener():  #   prev\_command = None  #   while True:  #       curr\_command = listener.get\_command()  # Get the full phrase from the listener  #       print(curr\_command)  #       if (curr\_command != prev\_command and curr\_command != ""):  # Detect changes in the command    #           request = command\_handler.run(curr\_command)  #           socketio.emit('command', request);  #           try:  #               command\_handler.speak()  # If the command has a script attached, speak...  #           except:  #               pass  #       prev\_command = curr\_command  #  @app.route('/index')  def index():      return render\_template('index.html')  @app.route('/task')  def task():      coba = tasks.query.limit(4).all()      return render\_template('task.html',coba=coba)  @app.route('/formTask')  def formTask():      coba = tasks.query.all()      return render\_template('formTask.html',coba=coba)  @app.route('/formUpload')  def formUpload():      coba = music.query.all()      return render\_template('formUpload.html',coba=coba)  @app.route('/prosesTask', methods=['POST'])  def proses\_task():      task1 = request.form.get('coba')        new\_task = tasks(task=task1)        db.session.add(new\_task)      db.session.commit()        return redirect(url\_for('formTask'))  @app.route('/<int:id>/deleteTask/')  def deleteTask(id):     task=tasks.query.filter\_by(id=id).one()     db.session.delete(task)     db.session.commit()     return redirect(url\_for('formTask'))  @app.route('/<int:id>/deleteMusic/')  def deleteMusic(id):     musicc=music.query.filter\_by(id=id).one()     os.remove(os.path.join(app.config['UPLOAD\_FOLDER'], musicc.name))     db.session.delete(musicc)     db.session.commit()     return redirect(url\_for('formUpload'))    @app.route('/formRegister')  def formRegister():      return render\_template('register.html')  @app.route('/registerProses', methods=['POST'])  def proses\_register():      email = request.form.get('email')      name = request.form.get('name')      password = request.form.get('password')      user = User.query.filter\_by(email=email).first()      if user:          flash('Email Sudah ada')          return redirect(url\_for('formRegister'))      new\_user = User(email=email, name=name, password=password)        db.session.add(new\_user)      db.session.commit()      return redirect(url\_for('formLogin'))  @app.route('/loginProses', methods=['POST'])  def proses\_login():      email = request.form.get('email')      password = request.form.get('password')      user = User.query.filter\_by(email=email).first()        if (user.password != password):          flash('Please check your login details and try again.')          return redirect(url\_for('formLogin'))        session['username'] = user.name      return redirect(url\_for('index'))  @app.route('/logout')  def logout():      session.pop('username', None)      return redirect(url\_for('formLogin'))  @socketio.on('connect')  def connect():      global thread  # Fetch the thread variable to only create one thread      if thread is None:          thread = socketio.start\_background\_task(target=command\_listener)  # Run listener in background socket function  if \_\_name\_\_ == '\_\_main\_\_':      socketio.run(app)      Take\_query() |
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**Hasilnya akan seperti dibawah**

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