

## LAMPIRAN

### Lampiran I Kode Program

#### 1. views/header.ejs

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Easysay</title>

    <link
      rel="icon"
      href="/images/easysay-icon.png"
      type="image"
    />

    <!-- Bootstrap CSS -->
    <link
      href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css"
      rel="stylesheet"
      integrity="sha384-
KK94CHFLLe+nY2dmCWGMq91rCGa5gtU4mk92HdvYe+M/SXH301p5ILy+dN9+nJOZ"
      crossorigin="anonymous"
    />

    <!-- our CSS -->
    <link rel="stylesheet" href="/css/master.css" />

    <!-- FontAwesome JS -->
    <script
      src="https://kit.fontawesome.com/6b522f63d7.js"
      crossorigin="anonymous"
    ></script>

    <!-- XLS to JSON -->
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/xlsx/0.16.2/xlsx.full.mi
n.js"></script>
    </head>

    <body>
      <!-- <h2>Header</h2> -->
```

#### 2. views/footer.ejs

```
<!-- <h3>Footer</h3> -->
<!-- Bootstrap JS -->
<script
  src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/js/bootstrap.bundle.min.js"
  integrity="sha384-
```

```
ENjdO4Dr2bkBIFxQpeoTz1HIcje39Wm4jDKdf19U8gI4ddQ3GYNS7NTKfAdvQSZe"
  crossorigin="anonymous"
></script>
</body>

</html>
```

### 3. views/title.ejs

```
<div>
  <a href="/">
    <h1><i class="fa-solid fa-file-circle-check"></i>Easysay</h1>
  </a>
</div>
```

### 4. views/titleSubtitle.ejs

```
<div>
  <a href="/">
    <h1><i class="fa-solid fa-file-circle-check"></i>Easysay</h1>
    <p>Cek esai cepat!</p>
  </a>
</div>
```

### 5. views/help/help.ejs

```
<%-include('header')%>

<div class="container-fluid">
  <%-include('titleSubtitle')%>

  <div class="accordion accordion-flush" id="accordionFlushExample">
    <div class="accordion-item">
      <h2 class="accordion-header" id="flush-headingOne">
        <button
          class="accordion-button collapsed"
          type="button"
          data-bs-toggle="collapse"
          data-bs-target="#flush-collapseOne"
          aria-expanded="false"
          aria-controls="flush-collapseOne"
        >
          Bagaimana cara kerja Easysay?
        </button>
      </h2>
      <div
        id="flush-collapseOne"
        class="accordion-collapse collapse"
        aria-labelledby="flush-headingOne"
        data-bs-parent="#accordionFlushExample"
      >
        <div class="accordion-body">
          Easysay bekerja dengan cara membandingkan jawaban
          pelajar(siswa/mahasiswa) yang ingin diperiksa dengan
          jawaban yang
```

```

        menurut pengajar(guru/dosen) benar. Maka dari itu aplikasi
ini hanya dapat digunakan untuk memeriksa esai yang memiliki jawaban
benar /
        teoritis.
        <br />
        
        <br />
        Bagian <strong>Kunci Jawaban</strong> diisi oleh jawaban
pengajar,
        sedangkan bagian <strong>Jawaban</strong> diisi oleh
jawaban pelajar
        yang ingin diperiksa. Kedua kolom diisi oleh pemeriksa
jawaban.
        <br />
        Easysay <em>bukan</em> aplikasi E-Learning dimana siswa
dapat menjawab
        soal dan langsung diperiksa.
        <br />
        Pada gambar diatas, 58.64 merupakan nilai hasil
pemeriksaan esai.
    </div>
</div>
<div class="accordion-item">
    <h2 class="accordion-header" id="flush-headingTwo">
        <button
            class="accordion-button collapsed"
            type="button"
            data-bs-toggle="collapse"
            data-bs-target="#flush-collapseTwo"
            aria-expanded="false"
            aria-controls="flush-collapseTwo"
        >
            Apa bahasa yang dapat digunakan pada Easysay?
        </button>
    </h2>
    <div
        id="flush-collapseTwo"
        class="accordion-collapse collapse"
        aria-labelledby="flush-headingTwo"
        data-bs-parent="#accordionFlushExample"
    >
        <div class="accordion-body">
            Easysay dapat memeriksa esai dengan jawaban berbahasa
            <strong>Indonesia</strong> atau <strong>Inggris</strong>.
            <em>"Atau"</em> berarti esai yang diperiksa sebaiknya
tidak berisi
            campuran dari kedua bahasa tersebut.
            <br />
            

```

```

        <br />
        Bahasa yang ingin digunakan untuk memeriksa esai dapat
dipilih pada
        halaman utama aplikasi.
    </div>
</div>
</div>
<div class="accordion-item">
    <h2 class="accordion-header" id="flush-headingThree">
        <button
            class="accordion-button collapsed"
            type="button"
            data-bs-toggle="collapse"
            data-bs-target="#flush-collapseThree"
            aria-expanded="false"
            aria-controls="flush-collapseThree"
        >
            Bagaimana cara cek satu jawaban?
        </button>
    </h2>
    <div
        id="flush-collapseThree"
        class="accordion-collapse collapse"
        aria-labelledby="flush-headingThree"
        data-bs-parent="#accordionFlushExample"
    >
        <div class="accordion-body">
            Untuk memeriksa satu jawaban, anda harus memilih terlebih
dahulu
            bahasa yang akan digunakan. Kemudian anda dapat menekan
tombol
            <strong>Cek satu jawaban</strong> seperti pada gambar.
            <br />
            
            <br />
            Kemudian anda dapat memasukkan jawaban pengajar dan
jawaban pelajar
            pada kolomnya masing-masing, setelah itu menekan tombol
            <strong>Periksa</strong>.
            <br />
            
            <br />
            Setelah itu, anda akan dialihkan ke halaman hasil
penilaian.
            <br />
            
            <br />

```

```

    </div>
  </div>
</div>
<div class="accordion-item">
  <h2 class="accordion-header" id="flush-headingFour">
    <button
      class="accordion-button collapsed"
      type="button"
      data-bs-toggle="collapse"
      data-bs-target="#flush-collapseFour"
      aria-expanded="false"
      aria-controls="flush-collapseFour"
    >
      Bagaimana cara cek banyak jawaban sekaligus?
    </button>
  </h2>
  <div
    id="flush-collapseFour"
    class="accordion-collapse collapse"
    aria-labelledby="flush-headingFour"
    data-bs-parent="#accordionFlushExample"
  >
    <div class="accordion-body">
      Anda dapat melakukan pengecekan banyak jawaban pelajar
dengan satu
      jawaban pengajar untuk dijadikan landasan perbandingan
esai.
      <br />
      Anda harus memilih bahasa yang ingin digunakan terlebih
dahulu,
      kemudian meenekan tombol <strong>Cek banyak
jawaban</strong> seperti
      pada gambar.
      <br />
      
      <br />
      Kemudian anda dapat memasukkan jawaban pengajar pada kolom
yang sudah
      disediakan. <br />
      Setelah itu, anda perlu mengunggah <strong>file</strong>
yang berisi
      nama dan jawaban pelajar untuk diperiksa masing-masing
terhadap
      jawaban pengajar.
      <br />
      Jangan lupa untuk menspesifikasikan kolom yang berisi
      <strong>nama pelajar</strong> pada <em>Kolom Nama
Pelajar</em>, dan
      kolom yang berisi <strong>jawaban pelajar</strong> pada
      <em>Kolom Jawaban Pelajar</em>.
      <br />
      
    </div>
  </div>
</div>

```

```

/>
<br />
Setelah itu, anda dapat menekan tombol
<strong>Periksa</strong> dan
anda akan dialihkan ke halaman hasil penilaian esai.
<br />

<br />
Kemudian apabila anda dapat mengunduh hasil penilaian
dengan menekan
  tombol <strong>Export to PDF</strong>
</div>
</div>
<div class="accordion-item">
  <h2 class="accordion-header" id="flush-headingFive">
    <button
      class="accordion-button collapsed"
      type="button"
      data-bs-toggle="collapse"
      data-bs-target="#flush-collapseFive"
      aria-expanded="false"
      aria-controls="flush-collapseFive"
    >
      Apa itu file dengan format CSV?
    </button>
  </h2>
  <div
    id="flush-collapseFive"
    class="accordion-collapse collapse"
    aria-labelledby="flush-headingFive"
    data-bs-parent="#accordionFlushExample"
  >
    <div class="accordion-body">
      File CSV adalah salah satu file Excel yang berisi tabel
      dan kolom.
      File ini dapat dibaca oleh Easysay untuk diperiksa setiap
      tabel dan
      kolomnya untuk pasangan nama dan jawaban yang telah
      dispesifikasikan
      saat anda hendak melakukan pemeriksaan banyak esai
      sekaligus.
      <br />
      
      <br />
      Pengembang menggunakan file CSV karena Google Form
      merupakan salah
      satu teknologi yang sering digunakan untuk Ujian Online di
      semua
      kalangan.
    </div>
  </div>

```

```

    </div>
  </div>
  <div class="accordion-item">
    <h2 class="accordion-header" id="flush-headingSix">
      <button
        class="accordion-button collapsed"
        type="button"
        data-bs-toggle="collapse"
        data-bs-target="#flush-collapseSix"
        aria-expanded="false"
        aria-controls="flush-collapseSix"
      >
        Bagaimana mendapatkan file CSV dari Google Form?
      </button>
    </h2>
    <div
      id="flush-collapseSix"
      class="accordion-collapse collapse"
      aria-labelledby="flush-headingSix"
      data-bs-parent="#accordionFlushExample"
    >
      <div class="accordion-body">
        Anda dapat membuka Google Form anda dan mengunduh jawaban
dengan
        bentuk CSV seperti tertera pada gambar berikut ini.
        <br />
        
        <br />
      </div>
    </div>
  </div>
  <div class="accordion-item">
    <h2 class="accordion-header" id="flush-headingSeven">
      <button
        class="accordion-button collapsed"
        type="button"
        data-bs-toggle="collapse"
        data-bs-target="#flush-collapseSeven"
        aria-expanded="false"
        aria-controls="flush-collapseSeven"
      >
        Bagaimana menentukan Nama dan Jawaban pelajar pada file
CSV?
      </button>
    </h2>
    <div
      id="flush-collapseSeven"
      class="accordion-collapse collapse"
      aria-labelledby="flush-headingSeven"
      data-bs-parent="#accordionFlushExample"
    >
      <div class="accordion-body">
        Anda dapat memeriksa file CSV yang ingin digunakan.
        <br />
        
    <br />
    <br />
    Pada contoh, kolom nama adalah "Name" karena pada kolom
dibawahnya
    terdapat nama pelajar yang ingin diperiksa.
    <br />
    Kemudian kolom jawaban pelajar adalah "I would like (come)
to the
    party with you." karena pada kolom dibawahnya terdapat
jawaban pelajar
    yang ingin diperiksa.
    <br />
    
    <br />
    Nama kolom nama dan nama kolom jawaban pelajar dapat
disalin langsung
    dari excel saat membuka file CSV dan ditempel langsung
pada aplikasi
    Easysay.
    <br />
    </div>
    </div>
    </div>
    </div>
    </div>
    <%-include('footer')%>

```

## 6. views/home/home.ejs

```

<%-include('header')%>
<div class="container-fluid">
    <div class="help_icon">
        <a href="/help" class="fs-3">
            <abbr title="Help"><i class="fa-solid fa-circle-
question"></i></abbr>
        </a>
    </div>
    <div class="text-center">
        <%-include('titleSubtitle')%>
        <form action="/option" method="post">
            <select class="form_language select_local" name="language"
id="language">
                <option selected disabled>Pilih Bahasa Esai</option>
                <option value="Indonesia">Indonesia</option>
                <option value="Inggris">Inggris</option>
            </select>
            <br />
            <br />

```



```

<div class="container text-center">
  <div class="row">
    <div class="col col-12 col-lg-5">
      <!-- <h2>Cek satu jawaban</h2> -->
      <button
        id="single"
        type="submit"
        name="select"
        value="single"
        class="btn btn-primary btn-lg"
      >
        Cek satu jawaban
      </button>
      <br />
      <p class="service_explanation">
        Cek satu jawaban esai pelajar berdasarkan jawaban yang
anda anggap
        benar dengan mengetikkan jawabannya.
      </p>
    </div>
    <div class="col col-md-2 d-none d-lg-block">
      <div class="vr h-100"></div>
    </div>
    <div class="col d-lg-none">
      <hr />
    </div>
    <div class="col col-12 col-lg-5">
      <!-- <h2>Cek banyak jawaban</h2> -->
      <button
        id="bulk"
        type="submit"
        name="select"
        value="bulk"
        class="btn btn-outline-primary btn-lg"
      >
        Cek banyak jawaban
      </button>
      <br />
      <p class="service_explanation">
        Cek banyak jawaban esai pelajar berdasarkan satu
jawaban yang anda
        anggap benar dengan mengunggah dokumen berisi jawaban
esai para
        pelajar.
      </p>
    </div>
  </div>
</form>
</div>
</div>

<%-include('footer')%>

```

## 7. views/indonesia/bulkJQuery.ejs

```

<%-include('header')%>

<div class="container-fluid">
  <div class="row">
    <div class="col col-6"><%-include('title')%></div>
    <div class="col col-6 d-flex justify-content-end mb-5">
      <h1><i class="fa-solid fa-file-csv"></i>Indonesia</h1>
    </div>
  </div>
  <form
    action="/idbulk"
    id="idbulk"
    enctype="multipart/form-data"
    method="post"
    class=""
  >
    <input type="hidden" name="language" value="Indonesia" />
    <div class="row">
      <div class="col col-12 col-lg-6 mb-5">
        <label class="form-label" for="teacherAnswer">Jawaban
Pengajar</label>
        <textarea
          class="form-control"
          name="teacherAnswer"
          id="teacherAnswer"
        ></textarea>
      </div>
      <div class="col col-12 col-lg-6 mb-5">
        <div>
          <label class="form-label" for="studentAnswer">
            >Excel Jawaban Pelajar</label>
          >
          <input
            class="form-control mb-3"
            type="file"
            accept=".csv"
            multiple="multiple"
            name="studentAnswers"
            id="studentAnswer"
          />
          <label class="form-label" for="nameColumns">Kolom Nama
Pelajar</label>
          <input
            class="form-control mb-3"
            type="text"
            name="nameColumns"
            id="nameColumns"
          />
          <label class="form-label" for="answerColumns">
            >Kolom Jawaban Pelajar</label>
          >
          <input
            class="form-control mb-3"
            type="text"

```

```

        name="answerColumns"
        id="answerColumns"
    />
</div>
</div>
</div>
<div class="text-center">
    <button class="btn btn-lg btn-danger mb-5"
type="submit">Periksa</button>
</div>
</form>
</div>

<%-include('footer')%>

```

## 8. views/indonesia/single.ejs

```

<%-include('header')%>

<div class="container-fluid">
    <div class="row">
        <div class="col col-6"><%-include('title')%></div>
        <div class="col col-6 d-flex justify-content-end mb-5">
            <h1><i class="fa-regular fa-pen-to-square"></i>Indonesia</h1>
        </div>
    </div>
    <form action="/ids" method="post" class="">
        <input type="hidden" name="language" value="Indonesia" />
        <input type="hidden" name="docid" id="docid" />
        <div class="row">
            <div class="col col-12 col-lg-6 mb-5">
                <label class="form-label" for="teacherAnswer">Jawaban
Pengajar</label>
                <textarea
                    class="form-control"
                    name="teacherAnswer"
                    id="teacherAnswer"
                ></textarea>
            </div>
            <div class="col col-12 col-lg-6 mb-5">
                <label class="form-label" for="studentAnswer">Jawaban
Pelajar</label>
                <textarea
                    class="form-control"
                    name="studentAnswer"
                    id="studentAnswer"
                ></textarea>
            </div>
        </div>
        <div class="text-center">
            <button class="btn btn-lg btn-warning mb-5"
type="submit">Periksa</button>
        </div>
    </form>
</div>

<script src="./js/milisecondDate.js"></script>

```

```
<%-include('footer')%>
```

## 9. views/inggris/bulk.ejs

```
<%-include('header')%>

<div class="container-fluid">
  <div class="row">
    <div class="col col-6"><%-include('title')%></div>
    <div class="col col-6 d-flex justify-content-end mb-5">
      <h1><i class="fa-solid fa-file-csv"></i>Inggris</h1>
    </div>
  </div>
  <form
    action="/enb"
    id="enbulk"
    enctype="multipart/form-data"
    method="post"
    class=""
  >
    <input type="hidden" name="language" value="Inggris" />
    <div class="row">
      <div class="col col-12 col-lg-6 mb-5">
        <label class="form-label" for="teacherAnswer">Jawaban
Pengajar</label>
        <textarea
          class="form-control"
          name="teacherAnswer"
          id="teacherAnswer"
        ></textarea>
      </div>
      <div class="col col-12 col-lg-6 mb-5">
        <div>
          <label class="form-label" for="studentAnswer">
            >Excel Jawaban Pelajar</label>
          >

          <input
            class="form-control mb-3"
            type="file"
            accept=".csv"
            multiple="multiple"
            name="studentAnswers"
            id="studentAnswer"
          />
          <label class="form-label" for="nameColumns">Kolom Nama
Pelajar</label>
          <input
            class="form-control mb-3"
            type="text"
            name="nameColumns"
            id="nameColumns"
          />
          <label class="form-label" for="answerColumns">
            >Kolom Jawaban Pelajar</label>
          >
        </div>
      </div>
    </div>
  </form>
</div>
```

```

        <input
            class="form-control mb-3"
            type="text"
            name="answerColumns"
            id="answerColumns"
        />
    </div>
</div>
</div>
<div class="text-center">
    <button
        class="btn btn-lg btn-outline-danger mb-5"
        id="button"
        type="submit"
    >
        Periksa
    </button>
</div>
</form>
</div>

<%-include('footer')%>

```

## 10. views/inggris/single.ejs

```

<%-include('header')%>

<div class="container-fluid">
    <div class="row">
        <div class="col col-6"><%-include('title')%></div>
        <div class="col col-6 d-flex justify-content-end mb-5">
            <h1><i class="fa-regular fa-pen-to-square"></i>Inggris</h1>
        </div>
    </div>
    <form action="/ens" method="post" class="">
        <input type="hidden" name="language" value="Inggris" />
        <input type="hidden" name="docid" id="docid" />
        <div class="row">
            <div class="col col-12 col-lg-6 mb-5">
                <label class="form-label" for="teacherAnswer">Jawaban
                Pengajar</label>
                <textarea
                    class="form-control"
                    name="teacherAnswer"
                    id="teacherAnswer"
                ></textarea>
            </div>
            <div class="col col-12 col-lg-6 mb-5">
                <label class="form-label" for="studentAnswer">Jawaban
                Pelajar</label>
                <textarea
                    class="form-control"
                    name="studentAnswer"
                    id="studentAnswer"
                ></textarea>
            </div>
        </div>
    </div>

```

```

        <div class="text-center">
            <button class="btn btn-lg btn-outline-warning mb-5"
type="submit">
                Periksa
            </button>
        </div>
    </form>
</div>

<script src="./js/milisecondDate.js"></script>

<%-include('footer')%>

```

## 11. views/result/bulkResult.ejs

```

<%- include("header") %>

<div class="container-fluid">
    <div class="row">
        <div class="col col-6"><%- include("title") %></div>
        <div class="col col-6 d-flex justify-content-end mb-5">
            <h1><i class="fa-solid fa-file-csv"></i><%= language %></h1>
        </div>
    </div>
    <div>
        <p class="form-label">Kunci Jawaban</p>
        <div class="form-control">
            <p><%= keyAnswer %></p>
        </div>
    </div>
    <!-- <div class="text-center container-fluid">
        <p>Mohon mengisi survey kepuasan anda terhadap Easysay</p>
        <button type="button" class="btn btn-info">
            <a
                href="https://forms.gle/FApH5uzhVbRB4NtY9"
                target="_blank"
                class="link-body-emphasis"
                >Survey 3 menit</a>
            >
        </button>
    </div> -->
    <div>
        <p class="form-label">Hasil Penilaian</p>
        <div class="row">
            <table class="table">
                <thead>
                    <tr>
                        <th scope="col">Nama</th>
                        <th scope="col">Jawaban</th>
                        <th scope="col">Nilai</th>
                    </tr>
                </thead>
                <tbody>
                    <% for( let i = 0; i < givenObjectKeyLength; i++ ) { %>
                    <tr>
                        <td><%= objectName[i] %></td>
                        <td><%= objectAnswer[i] %></td>

```

```

        <td><%= ((objectScore[i]/5)*100).toFixed(2) %>%</td>
    </tr>
    <br />
    <% } %>
</tbody>
</table>
</div>
</div>
</div>
<div class="container-fluid text-center mb-2">
    <button type="button" id="print" class="btn btn-secondary">
        Export to PDF
    </button>
</div>
<script src="js/printResult.js"></script>
<%- include("footer") %>

```

## 12. views/result/singleResult.ejs

```

<%- include("header") %>
<div class="container-fluid">
    <div class="row">
        <div class="col col-6"><%- include("title") %></div>
        <div class="col col-6 d-flex justify-content-end mb-5">
            <h1><i class="fa-regular fa-pen-to-square"></i><%= language
%></h1>
        </div>
    </div>

    <div>
        <p class="form-label">Kunci Jawaban</p>
        <div class="form-control">
            <p><%= keyAnswer %></p>
        </div>
    </div>
    <!-- <div class="text-center container-fluid">
        <p>Mohon mengisi survey kepuasan anda terhadap Easysay</p>
        <button type="button" class="btn btn-info">
            <a
                href="https://forms.gle/FApH5uzhVbRB4NtY9"
                target="_blank"
                class="link-body-emphasis"
                >Survey 3 menit</a>
            >
        </button>
    </div> -->
    <div>
        <div class="form-label">
            <div class="row mt-3">
                <div class="w-auto">Jawaban</div>
                <div class="col"><hr /></div>
                <div class="w-auto"><%= score %></div>
            </div>
        </div>
        <div class="form-control">

```

```

        <p><%= answer %></p>
    </div>
</div>
</div>

<%- include("footer") %>

```

### 13. models/english/aprilModel.py

```

# %%

import nltk
from nltk.tokenize import word_tokenize

# nltk.download("punkt")
# nltk.download("averaged_perceptron_tagger")
from nltk.stem import WordNetLemmatizer

# nltk.download("wordnet")
# nltk.download("omw-1.4")
from nltk.stem import WordNetLemmatizer
from nltk.corpus import wordnet
from textblob import TextBlob
import pandas as pd
import string
import re
import sys
from nltk.corpus import stopwords

# nltk.download("stopwords")
from nltk.stem import SnowballStemmer
from textblob import TextBlob
import re
from sklearn.feature_extraction.text import TfidfVectorizer
from sklearn.feature_extraction.text import CountVectorizer
from sklearn.feature_extraction.text import TfidfTransformer
from sklearn.metrics.pairwise import cosine_similarity

# %% [markdown]
# **Importing Dataset**

# %%

full_df = pd.read_csv(f"{sys.argv[1]}.csv")
full_df

# %% [markdown]
# **Text Preprocessing**

# %% [markdown]
# Spelling Correction

# %%
# Spelling Correction

full_df["keyAnswer"] = full_df["keyAnswer"].astype(str)

```



```

full_df["keySpell"] = full_df["keyAnswer"].apply(
    lambda txt: "".join(TextBlob(txt).correct())
)

# %%
full_df["studentAnswer"] = full_df["studentAnswer"].astype(str)
full_df["studentSpell"] = full_df["studentAnswer"].apply(
    lambda txt: "".join(TextBlob(txt).correct())
)

# %%
full_df[["keyAnswer", "keySpell"]]

# %% [markdown]
# Converting Abbreviation

# %%
contractions_dict = {
    "s": " is",
    "ain't": "is not",
    "aren't": "are not",
    "can't": "cannot",
    "can't've": "cannot have",
    "'cause": "because",
    "could've": "could have",
    "couldn't": "could not",
    "couldn't've": "could not have",
    "didn't": "did not",
    "doesn't": "does not",
    "don't": "do not",
    "hadn't": "had not",
    "hadn't've": "had not have",
    "hasn't": "has not",
    "haven't": "have not",
    "he'd": "he would",
    "he'd've": "he would have",
    "he'll": "he will",
    "he'll've": "he he will have",
    "he's": "he is",
    "how'd": "how did",
    "how'd'y": "how do you",
    "how'll": "how will",
    "how's": "how is",
    "I'd": "I would",
    "I'd've": "I would have",
    "I'll": "I will",
    "I'll've": "I will have",
    "I'm": "I am",
    "I've": "I have",
    "i'd": "i would",
    "i'd've": "i would have",
    "i'll": "i will",
    "i'll've": "i will have",
    "i'm": "i am",
    "i've": "i have",
    "isn't": "is not",
    "it'd": "it would",
    "it'd've": "it would have",
    "it'll": "it will",

```

"it'll've": "it will have",  
 "it's": "it is",  
 "let's": "let us",  
 "ma'am": "madam",  
 "mayn't": "may not",  
 "might've": "might have",  
 "mightn't": "might not",  
 "mightn't've": "might not have",  
 "must've": "must have",  
 "mustn't": "must not",  
 "mustn't've": "must not have",  
 "needn't": "need not",  
 "needn't've": "need not have",  
 "o'clock": "of the clock",  
 "oughtn't": "ought not",  
 "oughtn't've": "ought not have",  
 "shan't": "shall not",  
 "sha'n't": "shall not",  
 "shan't've": "shall not have",  
 "she'd": "she would",  
 "she'd've": "she would have",  
 "she'll": "she will",  
 "she'll've": "she will have",  
 "she's": "she is",  
 "should've": "should have",  
 "shouldn't": "should not",  
 "shouldn't've": "should not have",  
 "so've": "so have",  
 "so's": "so as",  
 "that'd": "that would",  
 "that'd've": "that would have",  
 "that's": "that is",  
 "there'd": "there would",  
 "there'd've": "there would have",  
 "there's": "there is",  
 "they'd": "they would",  
 "they'd've": "they would have",  
 "they'll": "they will",  
 "they'll've": "they will have",  
 "they're": "they are",  
 "they've": "they have",  
 "to've": "to have",  
 "wasn't": "was not",  
 "we'd": "we would",  
 "we'd've": "we would have",  
 "we'll": "we will",  
 "we'll've": "we will have",  
 "we're": "we are",  
 "we've": "we have",  
 "weren't": "were not",  
 "what'll": "what will",  
 "what'll've": "what will have",  
 "what're": "what are",  
 "what's": "what is",  
 "what've": "what have",  
 "when's": "when is",  
 "when've": "when have",  
 "where'd": "where did",  
 "where's": "where is",

```

    "where've": "where have",
    "who'll": "who will",
    "who'll've": "who will have",
    "who's": "who is",
    "who've": "who have",
    "why's": "why is",
    "why've": "why have",
    "will've": "will have",
    "won't": "will not",
    "won't've": "will not have",
    "would've": "would have",
    "wouldn't": "would not",
    "wouldn't've": "would not have",
    "y'all": "you all",
    "y'all'd": "you all would",
    "y'all'd've": "you all would have",
    "y'all're": "you all are",
    "y'all've": "you all have",
    "you'd": "you would",
    "you'd've": "you would have",
    "you'll": "you will",
    "you'll've": "you will have",
    "you're": "you are",
    "you've": "you have",
}

# %%
# Converting Abbreviation

contractions_re = re.compile("(%s)" %
"|".join(contractions_dict.keys()))

def expand_contractions(text, contractions_dict=contractions_dict):
    def replace(match):
        return contractions_dict[match.group(0)]

    return contractions_re.sub(replace, text)

full_df["studentSpell"] = full_df["studentSpell"].apply(
    lambda x: expand_contractions(x)
)
full_df["keySpell"] = full_df["keySpell"].apply(lambda x:
expand_contractions(x))

# %%
full_df[["studentAnswer", "studentSpell"]]

# %% [markdown]
# Case Folding

# %%
# Case Folding

full_df["keyLower"] = full_df["keySpell"].str.lower()
full_df["studentLower"] = full_df["studentSpell"].str.lower()

full_df[["studentSpell", "studentLower"]]

```

```

# %% [markdown]
# Removing Punctuation

# %%
# Removing Punctuation

PUNCT_TO_REMOVE = string.punctuation

def remove_punctuation(text):
    """custom function to remove the punctuation"""
    return text.translate(str.maketrans("", "", PUNCT_TO_REMOVE))

full_df["keyPunct"] = full_df["keyLower"].apply(lambda text:
remove_punctuation(text))
full_df["studentPunct"] = full_df["studentLower"].apply(
    lambda text: remove_punctuation(text)
)

full_df[["studentLower", "studentPunct"]]

# %% [markdown]
# Stopword Removal

# %%
# Stopword Removal

STOPWORDS = set(stopwords.words("english"))

def remove_stopwords(text):
    """custom function to remove the stopwords"""
    return " ".join([word for word in str(text).split() if word not
in STOPWORDS])

full_df["keyStopword"] = full_df["keyPunct"].apply(lambda text:
remove_stopwords(text))
full_df["studentStopword"] = full_df["studentPunct"].apply(
    lambda text: remove_stopwords(text)
)

full_df[["studentPunct", "studentStopword"]]

# %% [markdown]
# Stemming

# %%
# Stemming

stemmer = SnowballStemmer("english")

def stem_words(text):
    return " ".join([stemmer.stem(word) for word in text.split()])

```

```

full_df["studentStem"] = full_df["studentStopword"].apply(lambda
text: stem_words(text))
full_df["keyStem"] = full_df["keyStopword"].apply(lambda text:
stem_words(text))

full_df[["studentStopword", "studentStem"]]

# %% [markdown]
# POS Tagging

# %%
studentSplit = full_df["studentStopword"]
keySplit = full_df["keyStopword"]

studentSplitWords = [nltk.word_tokenize(str(sentence)) for sentence
in studentSplit]
keySplitWords = [nltk.word_tokenize(str(sentence)) for sentence in
keySplit]
full_df["studentSplit"] = studentSplitWords
full_df["keySplit"] = keySplitWords

# %%
# POS Tagging

full_df["keyPostag"] = full_df["keySplit"].apply(nltk.pos_tag)
full_df["studentPostag"] =
full_df["studentSplit"].apply(nltk.pos_tag)

full_df[["keyPostag", "studentPostag"]]

# %% [markdown]
# Lemmatizing

# %%
# Lemmatizing

lemmatizer = WordNetLemmatizer()
wordnet_map = {"N": wordnet.NOUN, "V": wordnet.VERB, "J":
wordnet.ADJ, "R": wordnet.ADV}

def lemmatize_words(text):
    pos_tagged_text = nltk.pos_tag(text.split())
    return " ".join(
        [
            lemmatizer.lemmatize(word, wordnet_map.get(pos[0],
wordnet.NOUN))
            for word, pos in pos_tagged_text
        ]
    )

full_df["studentLemmatized"] = full_df["studentStopword"].apply(
    lambda text: lemmatize_words(text)
)
full_df["keyLemmatized"] = full_df["keyStopword"].apply(
    lambda text: lemmatize_words(text)
)
full_df[["studentStopword", "studentLemmatized"]]

```

```

# %% [markdown]
# **TF-IDF**

# %% [markdown]
# TF

# %%
# TF for Lemmatized

full_df["keyLemmatized"] = full_df["keyLemmatized"].astype(str)
full_df["studentLemmatized"] =
full_df["studentLemmatized"].astype(str)

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]
    doc2 = full_df["studentLemmatized"][i]
    docs = (doc1, doc2)

    countvectorizer = CountVectorizer()
    terms = countvectorizer.fit_transform(docs)

    columns = countvectorizer.get_feature_names_out()
    tf = pd.DataFrame(
        terms.toarray(), index=["keyLemmatized",
"studentLemmatized"], columns=columns
    )

    # print(tf)

# %%
# TF for Stem

full_df["keyStem"] = full_df["keyStem"].astype(str)
full_df["studentStem"] = full_df["studentStem"].astype(str)

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    countvectorizer2 = CountVectorizer()
    terms2 = countvectorizer2.fit_transform(docs2)

    columns2 = countvectorizer2.get_feature_names_out()
    tf2 = pd.DataFrame(
        terms2.toarray(), index=["keyStem", "studentStem"],
columns=columns2
    )

    # print(tf2)

# %% [markdown]
# IDF

# %%
# IDF for Lemmatized

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]

```

```

doc2 = full_df["studentLemmatized"][i]
docs = (doc1, doc2)

countvectorizer = CountVectorizer()
terms = countvectorizer.fit_transform(docs)

tfidf_transformer = TfidfTransformer(smooth_idf=True,
use_idf=True)
tfidf_transformer.fit(terms)

df_idf = pd.DataFrame(
    tfidf_transformer.idf_,
    index=countvectorizer.get_feature_names_out(),
    columns=["idf_weights"],
)

# print(df_idf)

# %%
# IDF for Stem

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    countvectorizer = CountVectorizer()
    terms2 = countvectorizer.fit_transform(docs2)

    tfidf_transformer = TfidfTransformer(smooth_idf=True,
use_idf=True)
    tfidf_transformer.fit(terms2)

    df_idf2 = pd.DataFrame(
        tfidf_transformer.idf_,
        index=countvectorizer.get_feature_names_out(),
        columns=["idf_weights"],
    )

    # print(df_idf2)

# %% [markdown]
# TF-IDF

# %%
# TF-IDF for Lemmatized

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]
    doc2 = full_df["studentLemmatized"][i]
    docs = (doc1, doc2)
    countvectorizer = CountVectorizer()
    terms = countvectorizer.fit_transform(docs)
    X = tfidf_transformer.fit_transform(terms)
    tf_idf = pd.DataFrame(X.toarray(),
columns=countvectorizer.get_feature_names_out())
    # print(tf_idf)

# %%

```

```

# TF-IDF for Stem

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    countvectorizer = CountVectorizer()
    terms2 = countvectorizer.fit_transform(docs2)

    X2 = tfidf_transformer.fit_transform(terms2)
    tf_idf2 = pd.DataFrame(
        X2.toarray(),
        columns=countvectorizer.get_feature_names_out()
    )
    # print(tf_idf2)

# %% [markdown]
# **Cosine Similarity**

# %%
# Cosine Similarity for Lemmatized

tfidf_vectorizer = TfidfVectorizer()
similarity = []

full_df["keyLemmatized"] = full_df["keyLemmatized"].astype(str)
full_df["studentLemmatized"] =
full_df["studentLemmatized"].astype(str)

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]
    doc2 = full_df["studentLemmatized"][i]
    docs = (doc1, doc2)
    tfidf_matrix = tfidf_vectorizer.fit_transform(docs)
    tfidf_tokens = tfidf_vectorizer.get_feature_names_out()
    df_tfidfvect = pd.DataFrame(
        data=tfidf_matrix.toarray(),
        index=["keyLemmatized", "studentLemmatized"],
        columns=tfidf_tokens,
    )
    # print(df_tfidfvect)

    cosine_sim = cosine_similarity(tfidf_matrix[0], tfidf_matrix[1])
    # print("Cosine Similarity =", cosine_sim[0][0])
    # print("\n")
    similarity.append(cosine_sim[0][0])

full_df["cosineSimilarityLemma"] = similarity

# cosinelemma = full_df['cosineSimilarityLemma']
# cosinelemma.to_csv('cosinelemma.csv')

# %%
# Cosine Similarity for Stem

tfidf_vectorizer2 = TfidfVectorizer()
similarity2 = []

full_df["keyStem"] = full_df["keyStem"].astype(str)

```



```

full_df["studentStem"] = full_df["studentStem"].astype(str)

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    tfidf_matrix2 = tfidf_vectorizer2.fit_transform(docs2)
    tfidf_tokens2 = tfidf_vectorizer2.get_feature_names_out()
    df_tfidfvect2 = pd.DataFrame(
        data=tfidf_matrix2.toarray(),
        index=["keyStem", "studentStem"],
        columns=tfidf_tokens2,
    )
    # print(df_tfidfvect2)

    cosine_sim2 = cosine_similarity(tfidf_matrix2[0],
tfidf_matrix2[1])
    # print("Cosine Similarity =", cosine_sim2[0][0])
    # print("\n")
    similarity2.append(cosine_sim2[0][0])

full_df["cosineSimilarityStem"] = similarity2

# %% [markdown]
# **Scoring**

# %%
# Scoring for Lemmatized
scoring = full_df["cosineSimilarityLemma"]

scoring = scoring.mul(5)

# full_df = full_df.drop('scoreModel', axis=1)
full_df["scoreModelLemma"] = scoring

full_df[["scoreModelLemma"]]

# %%
# Scoring for Stemming
scoring2 = full_df["cosineSimilarityStem"]

scoring2 = scoring2.mul(5)

full_df["scoreModelStem"] = scoring2

full_df[["scoreModelStem"]]

# %% [markdown]
# Uji Analisis (Abaikan)

# %%
full_df.to_json()

# %%
# newfile = open("HasilPenilaianENG.json", "w")
# newfile.write(full_df.to_json())
# newfile.close()

print(full_df.to_json())

```

## 14. models/english/aprilModelTab.py

```
# %%

import nltk
from nltk.tokenize import word_tokenize

# nltk.download("punkt")
# nltk.download("averaged_perceptron_tagger")
from nltk.stem import WordNetLemmatizer

# nltk.download("wordnet")
# nltk.download("omw-1.4")
from nltk.stem import WordNetLemmatizer
from nltk.corpus import wordnet
from textblob import TextBlob
import pandas as pd
import string
import re
import sys
from nltk.corpus import stopwords

# nltk.download("stopwords")
from nltk.stem import SnowballStemmer
from textblob import TextBlob
import re
from sklearn.feature_extraction.text import TfidfVectorizer
from sklearn.feature_extraction.text import CountVectorizer
from sklearn.feature_extraction.text import TfidfTransformer
from sklearn.metrics.pairwise import cosine_similarity

# %% [markdown]
# **Importing Dataset**

# %%

full_df = pd.read_csv(f"{sys.argv[1]}.csv")
full_df

# %% [markdown]
# **Text Preprocessing**

# %% [markdown]
# Spelling Correction

# %%
# Spelling Correction

full_df["keyAnswer"] = full_df["keyAnswer"].astype(str)
full_df["keySpell"] = full_df["keyAnswer"].apply(
    lambda txt: "".join(TextBlob(txt).correct())
)

# %%
full_df["studentAnswer"] = full_df["studentAnswer"].astype(str)
full_df["studentSpell"] = full_df["studentAnswer"].apply(
    lambda txt: "".join(TextBlob(txt).correct())
)
```

```

# %%
full_df[["keyAnswer", "keySpell"]]

# %% [markdown]
# Converting Abbreviation

# %%
contractions_dict = {
    "'s": " is",
    "ain't": "is not",
    "aren't": "are not",
    "can't": "cannot",
    "can't've": "cannot have",
    "'cause": "because",
    "could've": "could have",
    "couldn't": "could not",
    "couldn't've": "could not have",
    "didn't": "did not",
    "doesn't": "does not",
    "don't": "do not",
    "hadn't": "had not",
    "hadn't've": "had not have",
    "hasn't": "has not",
    "haven't": "have not",
    "he'd": "he would",
    "he'd've": "he would have",
    "he'll": "he will",
    "he'll've": "he he will have",
    "he's": "he is",
    "how'd": "how did",
    "how'd'y": "how do you",
    "how'll": "how will",
    "how's": "how is",
    "I'd": "I would",
    "I'd've": "I would have",
    "I'll": "I will",
    "I'll've": "I will have",
    "I'm": "I am",
    "I've": "I have",
    "i'd": "i would",
    "i'd've": "i would have",
    "i'll": "i will",
    "i'll've": "i will have",
    "i'm": "i am",
    "i've": "i have",
    "isn't": "is not",
    "it'd": "it would",
    "it'd've": "it would have",
    "it'll": "it will",
    "it'll've": "it will have",
    "it's": "it is",
    "let's": "let us",
    "ma'am": "madam",
    "mayn't": "may not",
    "might've": "might have",
    "mightn't": "might not",
    "mightn't've": "might not have",
    "must've": "must have",

```

"mustn't": "must not",  
 "mustn't've": "must not have",  
 "needn't": "need not",  
 "needn't've": "need not have",  
 "o'clock": "of the clock",  
 "oughtn't": "ought not",  
 "oughtn't've": "ought not have",  
 "shan't": "shall not",  
 "sha'n't": "shall not",  
 "shan't've": "shall not have",  
 "she'd": "she would",  
 "she'd've": "she would have",  
 "she'll": "she will",  
 "she'll've": "she will have",  
 "she's": "she is",  
 "should've": "should have",  
 "shouldn't": "should not",  
 "shouldn't've": "should not have",  
 "so've": "so have",  
 "so's": "so as",  
 "that'd": "that would",  
 "that'd've": "that would have",  
 "that's": "that is",  
 "there'd": "there would",  
 "there'd've": "there would have",  
 "there's": "there is",  
 "they'd": "they would",  
 "they'd've": "they would have",  
 "they'll": "they will",  
 "they'll've": "they will have",  
 "they're": "they are",  
 "they've": "they have",  
 "to've": "to have",  
 "wasn't": "was not",  
 "we'd": "we would",  
 "we'd've": "we would have",  
 "we'll": "we will",  
 "we'll've": "we will have",  
 "we're": "we are",  
 "we've": "we have",  
 "weren't": "were not",  
 "what'll": "what will",  
 "what'll've": "what will have",  
 "what're": "what are",  
 "what's": "what is",  
 "what've": "what have",  
 "when's": "when is",  
 "when've": "when have",  
 "where'd": "where did",  
 "where's": "where is",  
 "where've": "where have",  
 "who'll": "who will",  
 "who'll've": "who will have",  
 "who's": "who is",  
 "who've": "who have",  
 "why's": "why is",  
 "why've": "why have",  
 "will've": "will have",  
 "won't": "will not",

```

        "won't've": "will not have",
        "would've": "would have",
        "wouldn't": "would not",
        "wouldn't've": "would not have",
        "y'all": "you all",
        "y'all'd": "you all would",
        "y'all'd've": "you all would have",
        "y'all're": "you all are",
        "y'all've": "you all have",
        "you'd": "you would",
        "you'd've": "you would have",
        "you'll": "you will",
        "you'll've": "you will have",
        "you're": "you are",
        "you've": "you have",
    }

}

# %%
# Converting Abbreviation

contractions_re = re.compile("(%s)" %
    "|".join(contractions_dict.keys()))

def expand_contractions(text, contractions_dict=contractions_dict):
    def replace(match):
        return contractions_dict[match.group(0)]

    return contractions_re.sub(replace, text)

full_df["studentSpell"] = full_df["studentSpell"].apply(
    lambda x: expand_contractions(x)
)
full_df["keySpell"] = full_df["keySpell"].apply(lambda x:
    expand_contractions(x)
)

# %%
full_df[["studentAnswer", "studentSpell"]]

# %% [markdown]
# Case Folding

# %%
# Case Folding

full_df["keyLower"] = full_df["keySpell"].str.lower()
full_df["studentLower"] = full_df["studentSpell"].str.lower()

full_df[["studentSpell", "studentLower"]]

# %% [markdown]
# Removing Punctuation

# %%
# Removing Punctuation

PUNCT_TO_REMOVE = string.punctuation

```

```

def remove_punctuation(text):
    """custom function to remove the punctuation"""
    return text.translate(str.maketrans("", "", PUNCT_TO_REMOVE))

full_df["keyPunct"] = full_df["keyLower"].apply(lambda text:
remove_punctuation(text))
full_df["studentPunct"] = full_df["studentLower"].apply(
    lambda text: remove_punctuation(text)
)

full_df[["studentLower", "studentPunct"]]

# %% [markdown]
# Stopword Removal

# %%
# Stopword Removal

STOPWORDS = set(stopwords.words("english"))

def remove_stopwords(text):
    """custom function to remove the stopwords"""
    return " ".join([word for word in str(text).split() if word not
in STOPWORDS])

full_df["keyStopword"] = full_df["keyPunct"].apply(lambda text:
remove_stopwords(text))
full_df["studentStopword"] = full_df["studentPunct"].apply(
    lambda text: remove_stopwords(text)
)

full_df[["studentPunct", "studentStopword"]]

# %% [markdown]
# Stemming

# %%
# Stemming

stemmer = SnowballStemmer("english")

def stem_words(text):
    return " ".join([stemmer.stem(word) for word in text.split()])

full_df["studentStem"] = full_df["studentStopword"].apply(lambda
text: stem_words(text))
full_df["keyStem"] = full_df["keyStopword"].apply(lambda text:
stem_words(text))

full_df[["studentStopword", "studentStem"]]

# %% [markdown]
# POS Tagging

```

```

# %%
studentSplit = full_df["studentStopword"]
keySplit = full_df["keyStopword"]

studentSplitWords = [nltk.word_tokenize(str(sentence)) for sentence
in studentSplit]
keySplitWords = [nltk.word_tokenize(str(sentence)) for sentence in
keySplit]
full_df["studentSplit"] = studentSplitWords
full_df["keySplit"] = keySplitWords

# %%
# POS Tagging

full_df["keyPostag"] = full_df["keySplit"].apply(nltk.pos_tag)
full_df["studentPostag"] =
full_df["studentSplit"].apply(nltk.pos_tag)

full_df[["keyPostag", "studentPostag"]]

# %% [markdown]
# Lemmatizing

# %%
# Lemmatizing

lemmatizer = WordNetLemmatizer()
wordnet_map = {"N": wordnet.NOUN, "V": wordnet.VERB, "J":
wordnet.ADJ, "R": wordnet.ADV}

def lemmatize_words(text):
    pos_tagged_text = nltk.pos_tag(text.split())
    return " ".join(
        [
            lemmatizer.lemmatize(word, wordnet_map.get(pos[0],
wordnet.NOUN))
            for word, pos in pos_tagged_text
        ]
    )

full_df["studentLemmatized"] = full_df["studentStopword"].apply(
    lambda text: lemmatize_words(text)
)
full_df["keyLemmatized"] = full_df["keyStopword"].apply(
    lambda text: lemmatize_words(text)
)
full_df[["studentStopword", "studentLemmatized"]]

# %% [markdown]
# **TF-IDF**

# %% [markdown]
# TF

# %%
# TF for Lemmatized

```

```

full_df["keyLemmatized"] = full_df["keyLemmatized"].astype(str)
full_df["studentLemmatized"] =
full_df["studentLemmatized"].astype(str)

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]
    doc2 = full_df["studentLemmatized"][i]
    docs = (doc1, doc2)

    countvectorizer = CountVectorizer()
    terms = countvectorizer.fit_transform(docs)

    columns = countvectorizer.get_feature_names_out()
    tf = pd.DataFrame(
        terms.toarray(), index=["keyLemmatized",
"studentLemmatized"], columns=columns
    )

    # print(tf)

# %%
# TF for Stem

full_df["keyStem"] = full_df["keyStem"].astype(str)
full_df["studentStem"] = full_df["studentStem"].astype(str)

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    countvectorizer2 = CountVectorizer()
    terms2 = countvectorizer2.fit_transform(docs2)

    columns2 = countvectorizer2.get_feature_names_out()
    tf2 = pd.DataFrame(
        terms2.toarray(), index=["keyStem", "studentStem"],
columns=columns2
    )

    # print(tf2)

# %% [markdown]
# IDF

# %%
# IDF for Lemmatized

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]
    doc2 = full_df["studentLemmatized"][i]
    docs = (doc1, doc2)

    countvectorizer = CountVectorizer()
    terms = countvectorizer.fit_transform(docs)

    tfidf_transformer = TfidfTransformer(smooth_idf=True,
use_idf=True)
    tfidf_transformer.fit(terms)

```



```

df_idf = pd.DataFrame(
    tfidf_transformer.idf_,
    index=countvectorizer.get_feature_names_out(),
    columns=["idf_weights"],
)

# print(df_idf)

# %%
# IDF for Stem

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    countvectorizer = CountVectorizer()
    terms2 = countvectorizer.fit_transform(docs2)

    tfidf_transformer = TfidfTransformer(smooth_idf=True,
use_idf=True)
    tfidf_transformer.fit(terms2)

    df_idf2 = pd.DataFrame(
        tfidf_transformer.idf_,
        index=countvectorizer.get_feature_names_out(),
        columns=["idf_weights"],
    )

    # print(df_idf2)

# %% [markdown]
# TF-IDF

# %%
# TF-IDF for Lemmatized

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]
    doc2 = full_df["studentLemmatized"][i]
    docs = (doc1, doc2)
    countvectorizer = CountVectorizer()
    terms = countvectorizer.fit_transform(docs)
    X = tfidf_transformer.fit_transform(terms)
    tf_idf = pd.DataFrame(X.toarray(),
columns=countvectorizer.get_feature_names_out())
    # print(tf_idf)

# %%
# TF-IDF for Stem

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    countvectorizer = CountVectorizer()
    terms2 = countvectorizer.fit_transform(docs2)

```

```

X2 = tfidf_transformer.fit_transform(terms2)
tf_idf2 = pd.DataFrame(
    X2.toarray(),
    columns=countvectorizer.get_feature_names_out()
)
# print(tf_idf2)

# %% [markdown]
# **Cosine Similarity**

# %%
# Cosine Similarity for Lemmatized

tfidf_vectorizer = TfidfVectorizer()
similarity = []

full_df["keyLemmatized"] = full_df["keyLemmatized"].astype(str)
full_df["studentLemmatized"] =
full_df["studentLemmatized"].astype(str)

for i in range(len(full_df)):
    doc1 = full_df["keyLemmatized"][i]
    doc2 = full_df["studentLemmatized"][i]
    docs = (doc1, doc2)
    tfidf_matrix = tfidf_vectorizer.fit_transform(docs)
    tfidf_tokens = tfidf_vectorizer.get_feature_names_out()
    df_tfidfvect = pd.DataFrame(
        data=tfidf_matrix.toarray(),
        index=["keyLemmatized", "studentLemmatized"],
        columns=tfidf_tokens,
    )
    # print(df_tfidfvect)

    cosine_sim = cosine_similarity(tfidf_matrix[0], tfidf_matrix[1])
    # print("Cosine Similarity =", cosine_sim[0][0])
    # print("\n")
    similarity.append(cosine_sim[0][0])

full_df["cosineSimilarityLemma"] = similarity

# cosinelemma = full_df['cosineSimilarityLemma']
# cosinelemma.to_csv('cosinelemma.csv')

# %%
# Cosine Similarity for Stem

tfidf_vectorizer2 = TfidfVectorizer()
similarity2 = []

full_df["keyStem"] = full_df["keyStem"].astype(str)
full_df["studentStem"] = full_df["studentStem"].astype(str)

for i in range(len(full_df)):
    doc12 = full_df["keyStem"][i]
    doc22 = full_df["studentStem"][i]
    docs2 = (doc12, doc22)
    tfidf_matrix2 = tfidf_vectorizer2.fit_transform(docs2)
    tfidf_tokens2 = tfidf_vectorizer2.get_feature_names_out()
    df_tfidfvect2 = pd.DataFrame(

```

```

        data=tfidf_matrix2.toarray(),
        index=["keyStem", "studentStem"],
        columns=tfidf_tokens2,
    )
    # print(df_tfidfvect2)

    cosine_sim2 = cosine_similarity(tfidf_matrix2[0],
tfidf_matrix2[1])
    # print("Cosine Similarity =", cosine_sim2[0][0])
    # print("\n")
    similarity2.append(cosine_sim2[0][0])

full_df["cosineSimilarityStem"] = similarity2

# %% [markdown]
# **Scoring**

# %%
# Scoring for Lemmatized
scoring = full_df["cosineSimilarityLemma"]

scoring = scoring.mul(5)

# full_df = full_df.drop('scoreModel', axis=1)
full_df["scoreModelLemma"] = scoring

full_df[["scoreModelLemma"]]

# %%
# Scoring for Stemming
scoring2 = full_df["cosineSimilarityStem"]

scoring2 = scoring2.mul(5)

scoring3 = (scoring2 / 5) * 100

full_df["scoreModelStem"] = scoring3

full_df[["scoreModelStem"]]

# %% [markdown]
# Uji Analisis (Abaikan)

# %%
full_df.to_json()

# %%
# newfile = open("HasilPenilaianENG.json", "w")
# newfile.write(full_df.to_json())
# newfile.close()

print(full_df.to_json())

```

## 15. models/indonesia/ASAG.py

```

import json
import math

```

```

from numpy.linalg import norm
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
import nltk
import re
import sys
from Sastrawi.Stemmer.StemmerFactory import StemmerFactory
import string
from string import digits
from sklearn.pipeline import Pipeline
from spell import spell_check

# from Lemma import lemmatization

# print("Masukkan Kunci Jawaban:")
kj = sys.argv[1]
# print("Masukkan Jawaban Siswa:")
jawaban = sys.argv[2]

def case_folding(text):
    pattern = r"[" + string.punctuation + "]"
    punct = re.sub(pattern, " ", str(text))
    case_fold = punct.lower()
    return case_fold

def spellcheck(text):
    text = spell_check(text)
    return text

def tokenization(text):
    tokens = re.split(" ", text)
    return tokens

def remove_digits(text):
    text = [item for item in text if item.isalpha()]
    return text

sw = nltk.corpus.stopwords.words("indonesian")

def remove_SW(text):
    text = [item for item in text if not item in sw]
    return text

factory = StemmerFactory()
stemmer = factory.create_stemmer()

def stemming(text):
    text = [stemmer.stem(item) for item in text]
    return text

```

```

# def lemma(text):
#     text = lemmatization(text)
#     return text

def term(q, ans):
    for i in q:
        if i == "":
            q.remove("")
    for i in ans:
        if i == "":
            ans.remove("")

    BoWQ = set(q)
    BoWA = set(ans)

    uniqueWords = BoWQ.union(BoWA)
    # print(uniqueWords)

    numOfWordsQ = dict.fromkeys(uniqueWords, 0)
    for word in q:
        numOfWordsQ[word] += 1

    numOfWordsA = dict.fromkeys(uniqueWords, 0)
    for word in ans:
        numOfWordsA[word] += 1

    # print('Unique words', numOfWordsA)

    term = pd.DataFrame([numOfWordsQ, numOfWordsA])
    term = term.transpose()
    term.columns = ["TF_Q", "TF_Ans"]

    # display(term)

    dfQ = dict.fromkeys(uniqueWords, 0)
    for word in BoWQ:
        dfQ[word] += 1

    dfA = dict.fromkeys(uniqueWords, 0)
    for word in BoWA:
        dfA[word] += 1

    term["DF_Q"] = dfQ.values()
    term["DF_A"] = dfA.values()

    DF = []
    for i in range(len(uniqueWords)):
        DF.append(term["DF_Q"][i] + term["DF_A"][i])
    term["DF"] = DF
    # display(term)

    idfDict = []

    for i in range(len(term["DF"])):
        idfDict.append(math.log10((2 + 1) / (term["DF"][i] + 1)) +
1)
        # print(idfDict)

```

```

term["IDF"] = idfDict

# display(term)

tfidfQ = []
tfidfA = []
for i in range(len(uniqueWords)):
    tfidfQ.append(term["TF_Q"][i] * term["IDF"][i])
    tfidfA.append(term["TF_Ans"][i] * term["IDF"][i])

term["TF-IDF_Q"] = np.array(tfidfQ)
term["TF-IDF_A"] = np.array(tfidfA)

cosine = np.dot(tfidfQ, tfidfA) / (np.linalg.norm(tfidfQ) *
np.linalg.norm(tfidfA))

if math.isnan(cosine):
    cosine = 0
skor = round((cosine * 100), 2)
return skor

case_fold_q = case_folding(kj)
case_fold_ans = case_folding(jawaban)
spell_q = spell_check(case_fold_q)
spell_ans = spell_check(case_fold_ans)
token_q = tokenization(spell_q)
token_ans = tokenization(spell_ans)
token_q = remove_digits(token_q)
token_ans = remove_digits(token_ans)
filter_q = remove_SW(token_q)
filter_ans = remove_SW(token_ans)

stem_q = stemming(filter_q)
stem_ans = stemming(filter_ans)

# lemma_q = lemma(filter_q)
# lemma_ans = lemma(filter_ans)

# print("Skor Tanpa pre-processing: ",
term(tokenization(kj), tokenization(jawaban)))
# print("Skor Menggunakan Stemming: ", term(stem_q, stem_ans))
# print("Skor Menggunakan Lemmatization: ", term(lemma_q,
lemma_ans))

sctScore = str(term(stem_q, stem_ans))
newfile = open(f"{sys.argv[3]}.txt", "a")
# newfile.write(
#     '{"kj": "'
#     + case_fold_q
#     + '",\n"ans": "'
#     + case_fold_ans
#     + '",\n"score": '
#     + sctScore
#     + '"}'
# )
newfile.write(f"{sctScore}\n")
newfile.close()
print("done")

```

## 16. models/indonesia/ASAGbulk.py

```

import json
import math
from numpy.linalg import norm
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
import nltk
import re
import sys
from Sastrawi.Stemmer.StemmerFactory import StemmerFactory
import string
from string import digits
from sklearn.pipeline import Pipeline
from spell import spell_check

# from Lemma import lemmatization

# print("Masukkan Kunci Jawaban:")
kj = sys.argv[1]
# print("Masukkan Jawaban Siswa:")
jawaban = sys.argv[2]

def case_folding(text):
    pattern = r"[" + string.punctuation + "]"
    punct = re.sub(pattern, " ", str(text))
    case_fold = punct.lower()
    return case_fold

def spellcheck(text):
    text = spell_check(text)
    return text

def tokenization(text):
    tokens = re.split(" ", text)
    return tokens

def remove_digits(text):
    text = [item for item in text if item.isalpha()]
    return text

sw = nltk.corpus.stopwords.words("indonesian")

def remove_SW(text):
    text = [item for item in text if not item in sw]
    return text

factory = StemmerFactory()
stemmer = factory.create_stemmer()

```

```

def stemming(text):
    text = [stemmer.stem(item) for item in text]
    return text

# def lemma(text):
#     text = lemmatization(text)
#     return text

def term(q, ans):
    for i in q:
        if i == "":
            q.remove("")
    for i in ans:
        if i == "":
            ans.remove("")

    BoWQ = set(q)
    BoWA = set(ans)

    uniqueWords = BoWQ.union(BoWA)
    # print(uniqueWords)

    numOfWordsQ = dict.fromkeys(uniqueWords, 0)
    for word in q:
        numOfWordsQ[word] += 1

    numOfWordsA = dict.fromkeys(uniqueWords, 0)
    for word in ans:
        numOfWordsA[word] += 1

    # print('Unique words', numOfWordsA)

    term = pd.DataFrame([numOfWordsQ, numOfWordsA])
    term = term.transpose()
    term.columns = ["TF_Q", "TF_Ans"]

    # display(term)

    dfQ = dict.fromkeys(uniqueWords, 0)
    for word in BoWQ:
        dfQ[word] += 1

    dfA = dict.fromkeys(uniqueWords, 0)
    for word in BoWA:
        dfA[word] += 1

    term["DF_Q"] = dfQ.values()
    term["DF_A"] = dfA.values()

    DF = []
    for i in range(len(uniqueWords)):
        DF.append(term["DF_Q"][i] + term["DF_A"][i])
    term["DF"] = DF
    # display(term)

    idfDict = []

```



```

        for i in range(len(term["DF"])):
            idfDict.append(math.log10((2 + 1) / (term["DF"][i] + 1)) +
1)
            # print(idfDict)
        term["IDF"] = idfDict

        # display(term)

        tfidfQ = []
        tfidfA = []
        for i in range(len(uniqueWords)):
            tfidfQ.append(term["TF_Q"][i] * term["IDF"][i])
            tfidfA.append(term["TF_Ans"][i] * term["IDF"][i])

        term["TF-IDF_Q"] = np.array(tfidfQ)
        term["TF-IDF_A"] = np.array(tfidfA)

        cosine = np.dot(tfidfQ, tfidfA) / (np.linalg.norm(tfidfQ) *
np.linalg.norm(tfidfA))

        if math.isnan(cosine):
            cosine = 0
        skor = round((cosine * 100), 2)
        return skor

case_fold_q = case_folding(kj)
case_fold_ans = case_folding(jawaban)
spell_q = spell_check(case_fold_q)
spell_ans = spell_check(case_fold_ans)
token_q = tokenization(spell_q)
token_ans = tokenization(spell_ans)
token_q = remove_digits(token_q)
token_ans = remove_digits(token_ans)
filter_q = remove_SW(token_q)
filter_ans = remove_SW(token_ans)

stem_q = stemming(filter_q)
stem_ans = stemming(filter_ans)

# lemma_q = lemma(filter_q)
# lemma_ans = lemma(filter_ans)

# print("Skor Tanpa pre-processing: ",
term(tokenization(kj), tokenization(jawaban)))
# print("Skor Menggunakan Stemming: ", term(stem_q, stem_ans))
# print("Skor Menggunakan Lemmatization: ", term(lemma_q,
lemma_ans))

sctScore = str(term(stem_q, stem_ans))
# newfile = open(f"{sys.argv[3]}.txt", "a")
# # newfile.write(
# #     '{"kj": "'
# #     + case_fold_q
# #     + '",\n"ans": "'
# #     + case_fold_ans
# #     + '",\n"score": '
# #     + sctScore
# #     + '"}'

```

```
# # )
# newfile.write(f"{sctScore}\n")
# newfile.close()
print(sctScore)
```

## 17. models/indonesia/slang.dic

```
{
  "lpun": "satupun",
  "7an": "tujuan",
  "Dr.": "dokter",
  "dr.": "dokter",
  "drg.": "dokter gigi",
  "Jkt": "Jakarta",
  "Jkw": "jokowi",
  "Napza": "narkoba psikotropika dan zat adiktif",
  "Nasihat": "nasehat",
  "ababil": "abg labil",
  "abis": "habis",
  "acc": "accord",
  "accord": "sesuai",
  "ad": "ada",
  "adl": "adalah",
  "adlah": "adalah",
  "adlh": "adalah",
  "administ": "administrasi",
  "adoh": "aduh",
  "afaik": "as far as i know",
  "agma": "agama",
  "aha": "tertawa",
  "ahaha": "haha",
  "ahiok": "ahok",
  "mehong": "mahal",
  "ahoax": "ahok",
  "ahokncc": "ahok",
  "aing": "saya",
  "aj": "saja",
  "aja": "saja",
  "ajak2": "ajak-ajak",
  "ajep-ajep": "dunia gemerlap",
  "ajj": "saja",
  "ak": "aku",
  "aka": "dikenal juga sebagai",
  "akherat": "akhirat",
  "akhirx": "akhirnya",
  "akika": "aku",
  "akko": "aku",
  "akkoh": "aku",
  "akku": "aku",
  "akn": "akan",
  "aktifis2": "aktivis-aktivis",
  "aktivi": "aktivis",
  "aktivis2": "aktivis-aktivis",
  "akun2": "akun-akun",
  "akuwh": "aku",
  "akyu": "aku",
  "alay": "norak",
```

```

"aleg": "caleg",
"alih2": "alih-alih",
"aljasa": "asal jadi saja",
"almaidahyg": "almaidah",
"alow": "halo",
"ama": "sama",
"ambilin": "ambilkan",
"ambl": "ambil",
"amerik": "amarika",
"anak2": "anak-anak",
"analisis": "analisis",
"ancur": "hancur",
"angis": "nangis",
"anjay": "anjing",
"anjir": "anjing",
"anjrit": "anjing",
"ank": "anak",
"anter": "antar",
"ap": "apa",
"ap2": "apa-apa",
"apaan": "apa",
"apasih": "apa sih",
"ape": "apa",
"apes": "sial",
"aplot": "ungguh",
"aps": "apa",
"apva": "apa",
"aq": "saya",
"aqu": "aku",
"aquwh": "aku",
"as": "amerika serikat",
"asap": "sesegera mungkin",
"asbun": "asal bunyi",
"aseek": "asyik",
"aseekk": "asyik",
"asek": "asyik",
"asekk": "asyik",
"aseknya": "asyiknya",
"asem": "asam",
"asoy": "asyik",
"aspal": "asli tetapi palsu",
"astrojim": "astagfirullahaladzim",
"astul": "asal tulis",
"ath": "kalau begitu",
"ato": "atau",
"ats": "atas",
"atuh": "kalau begitu",
"atvsi": "asosiasi televisi swasta indonesia",
"au": "angkatan udara",
"au ah": "tidak mau tahu",
"ava": "avatar",
"awak": "saya",
"aws": "awas",
"ay": "sayang",
"ayang": "sayang",
"ayank": "sayang",
"ayat2": "ayat-ayat",
"ayok": "ayo",
"b2": "berdua",

```

"b4": "sebelum",  
 "bacot": "banyak bicara",  
 "bajir": "banjir",  
 "bakalan": "akan",  
 "bales": "balas",  
 "bandes": "bantuan desa",  
 "bangdes": "pembangunan desa",  
 "bangedh": "banget",  
 "bangkotan": "tua",  
 "banpol": "bantuan polisi",  
 "banpres": "bantuan presiden",  
 "banpur": "bantuan tempur",  
 "bansarkas": "bantuan sarana kesehatan",  
 "baper": "bawa perasaan",  
 "basbang": "basi",  
 "basis": "badan amal, zakat, infak, dan sedekah",  
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 "bcanda": "bercanda",  
 "bcoz": "karena",  
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 "beliin": "belikan",  
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 "bem": "badan eksekutif mahasiswa",  
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"bilanh": "bilang",  
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 "bkmt": "badan kontak majelis taklim",  
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 "boljug": "boleh juga",  
 "bolot": "bodoh",  
 "bonek": "bocah nekat",  
 "bonyok": "ayah ibu",  
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 "boyeh": "boleh",  
 "bpk": "bapak",  
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 "brb": "segera kembali",  
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 "brngkt": "berangkat",  
 "bro": "saudara laki-laki",  
 "brp": "berapa",  
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 "btw": "ngomong-ngomong",

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"bu_bu": "tidur",
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"buber": "buka bersama",
"bubu": "tidur",
"bujubune": "luar biasa",
"bumil": "ibu hamil",
"bunuh2an": "bunuh-bunuhan",
"buser": "buru sergap",
"buzzerbuzzer": "buzzer",
"bw": "bawa",
"bwhn": "bawahan",
"bwt": "buat",
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"byk": "banyak",
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"c8": "chat",
"cabal": "sabar",
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"cadas": "keren",
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"calo": "makelar",
"cama-cama": "sama-sama",
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"cangcut": "celana dalam",
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"cape": "capek",
"capek": "lelah",
"caper": "cari perhatian",
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"caur": "jelek",
"cayalah": "percaya",
"cb": "coba",
"cc": "carbon copy",
"ce": "cewek",
"cekak": "tidak ada uang",
"cekal": "cegah tangkal",
"cekidot": "coba lihat",
"cemen": "penakut",
"cemplungin": "cemplungkan",
"cengengesan": "tertawa",
"cepat2": "cepat cepat",
"ceper": "pendek",
"cepet": "cepat",
"ceu": "kakak perempuan",
"cew": "cewek",
"cewe": "cewek",
"chuyunk": "sayang",
"cibuk": "sibuk",
"cimeng": "ganja",
"cin": "cinta",
"cipika cipiki": "cium pipi kanan cium pipi kiri",
"ciye": "cie",
"ciyh": "sih",
"cjr": "coboy junior",

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"ckck": "ck",
"ckepp": "cakep",
"ckp": "cukup",
"clbk": "cinta lama bersemi kembali",
"cm": "cuma",
"cmiiw": "correct me if i'm wrong",
"cmpr": "campur",
"cmpur": "campur",
"cnenk": "senang",
"cong": "banci",
"congor": "mulut",
"conlok": "cinta lokasi",
"cos": "cause",
"cow": "cowok",
"cowwyy": "maaf",
"coz": "karena",
"cp": "siapa",
"cpa": "siapa",
"cpe": "capek",
"cppa": "siapa",
"cppe": "capek",
"cr": "cara",
"crny": "caranya",
"cth": "contoh",
"cucok": "cocok",
"cuek": "tidak acuh",
"cuex": "cuek",
"cuman": "Cuma",
"cumi": "Cuma miscall",
"cungkring": "kurus tinggi",
"cups": "culun",
"cupu": "culun",
"curanmor": "pencurian kendaraan bermotor",
"curas": "pencurian dengan kekerasan",
"curcol": "curahan hati colongan",
"curhat": "curahan hati",
"cust": "customer",
"cwek": "cewek",
"cwo": "cowo",
"cwok": "cowok",
"cyin": "cinta",
"cz": "karena",
"d": "di",
"dagh": "sudah",
"dah": "sudah",
"damang": "sehat",
"dapet": "dapat",
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"de": "adik",
"dech": "deh",
"dek": "adik",
"deket": "dekat",
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"denger": "dengar",
"dengerin": "dengarkan",
"deyh": "deh",
"dg": "dengan",
"dgn": "dengan",
"dgr": "dengar",

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"dh": "sudah",  
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 "die": "dia",  
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 "digosipin": "digosipkan",  
 "dikti": "direktoral jendral pendidikan tinggi",  
 "dimaafin": "dimaafkan",  
 "dimana2": "dimana-mana",  
 "dimintak": "diminta",  
 "dimna": "dimana",  
 "direhap": "direhab",  
 "disono": "di sana",  
 "diuber": "dikejar",  
 "dket": "dekat",  
 "dki": "daerah khusus ibukota",  
 "dkit": "sedikit",  
 "dkk": "dan kawan-kawan",  
 "dl": "dulu",  
 "dll": "dan lain-lain",  
 "dlm": "dalam",  
 "dlu": "dulu",  
 "dmaksud": "dimaksud",  
 "dmn": "dimana",  
 "dn": "dan",  
 "dnngn": "dengan",  
 "doang": "saja",  
 "dodol": "bodoh",  
 "doi": "dia",  
 "doku": "uang",  
 "donat": "donut",  
 "doughnat": "donut",  
 "don juan": "playboy",  
 "dongok": "bodoh",  
 "dongs": "dong",  
 "donk": "dong",  
 "donlot": "unduh",  
 "dpr": "dewan perwakilan rakyat",  
 "dprd": "dewan perwakilan rakyat daerah",  
 "dpt": "dapat",  
 "dr": "dari",  
 "dri": "dari",  
 "drmana": "darimana",  
 "drmn": "darimana",  
 "drpd": "daripada",  
 "drtd": "dari tadi",  
 "dsb": "dan sebagainya",  
 "dst": "dan seterusnya",  
 "dstu": "disitu",  
 "dtg": "datang",  
 "dugem": "dunia gemerlap",  
 "duh": "aduh",  
 "duit": "uang",  
 "dulu": "dahulu",  
 "dungu": "bodoh",  
 "duren": "durian",  
 "dy": "dia",  
 "dzolim": "zalim",  
 "ed": "edisi",  
 "edan": "gila",



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"ego": "emosi",
"egp": "emang gue pikirin",
"eike": "aku",
"eke": "aku",
"elo": "kamu",
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"emang": "memang",
"emangnya": "memangnya",
"emank": "memang",
"emg": "memang",
"emng": "memang",
"emte": "makan teman",
"endak": "tidak",
"engga": "tidak",
"enggak": "tidak",
"entar": "nanti",
"envy": "iri",
"eps": "episode",
"etc": "et cetera",
"ex": "mantan",
"ext": "extension",
"fahami": "pahami",
"fak": "fakultas",
"fakta2": "fakta-fakta",
"faktakta": "fakta",
"fax": "facsimile",
"fb": "facebook",
"fdsi": "forum diskusi suporter indonesia",
"fifo": "first in first out",
"finek": "finansial ekonomi",
"fisip": "fakultas ilmu sosial dan ilmu politik",
"fitnag": "fitnah",
"folbek": "follow back",
"fpi": "front pembela islam",
"fwd": "diterukan",
"fyi": "sebagai informasi",
"g": "tidak",
"ga": "tidak",
"gaada": "tidak ada uang",
"gabisa": "tidak bisa",
"gag": "tidak",
"gahar": "sangar",
"gaje": "tidak jelas",
"gak": "tidak",
"gak papa": "tidak apa-apa",
"gamau": "tidak mau",
"gan": "juragan",
"gantengbs": "ganteng",
"gantengsaya": "ganteng",
"gapapa": "tidak apa-apa",
"gaptek": "gagap teknologi",
"gatau": "tidak tahu",
"gatek": "gagap teknologi",
"gatot": "gagal total",
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"gax": "tidak",
"gbs": "tidak bisa",
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"gda": "tidak ada uang",

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"gebetan": "orang yang disuka",
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"gegara": "gara-gara",
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"gelo": "gila",
"gene": "begini",
"gepeng": "gelandangan dan pengemis",
"ghiey": "lagi",
"ghiy": "lagi",
"gi": "lagi",
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"gile": "gila",
"giman": "gigi mancung",
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"gini": "begini",
"gingerbread": "ginger bread",
"gin": "gigi nongol",
"gitchu": "gitu",
"gitu": "gitu",
"gitu": "begini",
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"gk": "tidak",
"gmana": "bagaimana",
"gm": "bagaimana",
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"globlog": "goblok",
"globlok": "bodoh",
"gokil": "gila",
"golongan2": "golongan-golongan",
"golput": "golongan putih",
"gombal": "suka merayu",
"good": "bagus",
"governor": "gubernur",
"gowes": "mengayuh sepeda",
"gp": "tidak pakai lama",
"gpny": "tidak punya",
"gp": "tidak apa-apa",
"gr": "gede rasa",
"greton": "gratis",
"gretongan": "gratisan",
"gt": "gitu",
"gtau": "tidak tahu",
"gtw": "tidak tahu",
"gua": "saya",
"gub": "gubernur",
"gue": "saya",
"guna": "menggunakan",
"guoblok": "goblok",
"guys": "teman-teman",
"gw": "saya",
"gws": "cepat sembuh",
"ha": "tertawa",
"habis2an": "habis-habisan",
"haghaghag": "tertawa",
"haha": "tertawa",
"hak2": "hak hak",
"hakhak": "tertawa",
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"ham": "hak asasi manusia",

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"handak": "bahan peledak",
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"hellow": "halo",
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"helow": "halo",
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"hey": "hai",
"hi": "hai",
"hlm": "halaman",
"hlng": "hilang",
"hny": "hanya",
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"hoax": "isu bohong",
"hot2nya": "hot-hotnya",
"houm": "rumah",
"hr": "hari",
"hrs": "harus",
"hrus": "harus",
"hubad": "hubungan angkatan darat",
"hubdar": "perhubungan darat",
"hubla": "perhubungan laut",
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"huft": "mengeluh",
"hum": "rumah",
"humas": "hubungan masyarakat",
"humoris": "lucu",
"humz": "rumah",
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"icecreamsandwich": "ice cream sandwich",
"ide2": "ide-ide",
"idk": "saya tidak tahu",
"idup": "hidup",
"ikon": "lambang",
"ilang": "hilang",
"ilfeel": "tidak suka",
"ilfil": "tidak suka",
"imba": "jago sekali",
"imho": "in my humble opinion",
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"info": "informasi",
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"irit": "hemat",
"isengin": "bercanda",
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"istaa": "nista",
"isu2": "isu-isu",
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"ito": "itu",
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"iye": "iya",
"iyo": "iya",
"ja": "saja",
"jabar": "jawa barat",
"jablay": "jarang dibelai",
"jadiin": "jadikan",
"jadul": "jaman dulu",
"jaim": "jaga image",
"jan": "jangan",
"jancuk": "anjing",
"janjinyaa": "janji",
"jargon2": "jargon jargon",
"jatim": "jawa timur",
"jatohin": "menjatuhkan",
"jawapan": "jawaban",
"jayus": "tidak lucu",
"jd": "jadi",
"jdi": "jadi",
"jdikan": "jadikan",
"je": "saja",
"jelas2": "jelas-jelas",
"jem": "jam",
"jentelmen": "berani",
"jg": "juga",
"jga": "juga",
"jgk": "juga",
"jgn": "jangan",
"jgnkan": "jangan",
"ji2k": "jijik",
"jijay": "jijik",
"jil": "jaringan islam liberal",
"jir": "anjing",
"jjk": "jijik",
"jk": "jika",
"jkt": "jakarta",
"jln": "jalan",
"jng": "jangan",
"jnj": "janji",
"joget2": "joget-joget",
"jomblo": "tidak punya pacar",
"jth": "jatuh",
"jual2": "jual-jual",
"jubir": "juru bicara",
"jurdil": "jujur adil",
"jutek": "galak",
"jwb": "jawab",
"k": "ke",
"ka": "kakang",
"kab": "kabupaten",
"kabag": "kepala bagian",
"kabor": "kabur",
"kacian": "kasihan",
"kacrut": "kacau",

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"kadang2": "kadang kadang",  
 "kadit": "kepala direktorat",  
 "kadiv": "kepala divisi",  
 "kaga": "tidak",  
 "kagak": "tidak",  
 "kaka": "kakak",  
 "kalo": "kalau",  
 "kaltim": "kalimantan timur",  
 "kampret": "sialan",  
 "kamtib": "keamanan dan ketertiban",  
 "kamtibmas": "keamanan dan ketertiban masyarakat",  
 "kamuh": "kamu",  
 "kamuwh": "kamu",  
 "kamyu": "kamu",  
 "kan": "akan",  
 "kanwil": "kantor wilayah",  
 "kapolri": "Kepala Polisi Republik Indonesia",  
 "kapt": "kapten",  
 "karna": "karena",  
 "kasubbag": "kepala subbagian",  
 "kasubbid": "kepala subbidang",  
 "kata2": "kata-kata",  
 "katrok": "kampungan",  
 "kau": "kamu",  
 "kawan2": "kawan-kawan",  
 "kayanya": "kayaknya",  
 "kbar": "kabar",  
 "kbr": "kabar",  
 "kcian": "kasihan",  
 "kdng": "kadang",  
 "kdu": "harus",  
 "ke": "kah",  
 "kebranian": "keberanian",  
 "keburu": "terlanjur",  
 "kec": "kecamatan",  
 "kedubes": "kedutaan besar",  
 "kejar2": "kejar-kejar",  
 "kejurnas": "kejuaraan nasional",  
 "kek": "seperti",  
 "kekeuh": "keras kepala",  
 "keknya": "kayanya",  
 "kel": "kelurahan",  
 "keliatan": "kelihatan",  
 "kemaren": "kemarin",  
 "kemenag": "kementrian agama",  
 "kemenkominfo": "kementrian komunikasi dan informatika",  
 "kemrin": "kemarin",  
 "keneh": "masih",  
 "kentot": "senggama",  
 "kepengen": "mau",  
 "kepikiran": "terpikirkan",  
 "kepingin": "mau",  
 "kepo": "mau tahu urusan orang",  
 "kepsek": "kepala sekolah",  
 "kere": "tidak punya uang",  
 "kesbang": "kesatuan bangsa",  
 "kesian": "kasihan",  
 "kesihatan": "kesehatan",  
 "kesra": "kesejahteraan rakyat",

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"ketauan": "ketahuan",
"ketrima": "diterima",
"ketum": "ketua umum",
"keukeuh": "keras kepala",
"kgiatan": "kegiatan",
"khan": "kan",
"kibul": "bohong",
"kibus": "kaki busuk",
"kimpoi": "kawin",
"kk": "kakak",
"kl": "kalau",
"kliau": "kalian",
"kliau": "kalian",
"klmpk": "kelompok",
"klo": "kalau",
"kloter": "kelompok terbang",
"cls": "kelas",
"kluarga": "keluarga",
"klw": "kalau",
"klwrga": "keluarga",
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"kmaksiatan": "kemaksiatan",
"kmari": "kemari",
"kmna": "kemana",
"kmpr": "kampus",
"kmpr": "kampus",
"kmrm": "kemeramen",
"kmrn": "kemarin",
"kn": "kan",
"knal": "kenal",
"kne": "terlibat",
"knl": "kenal",
"knpr": "kenapa",
"knpr": "kenapa",
"koar": "teriak",
"kodya": "kota madya",
"kog": "kok",
"komdis": "komisi disiplin",
"kompi": "komputer",
"komsov": "komunis soviet",
"komtiong": "komunis Tiongkok",
"komun": "komunitas",
"kongkow": "kumpul bareng teman-teman",
"konjen": "konsulat jenderal",
"konpers": "konferensi pers",
"kopdar": "kopi darat",
"koq": "kok",
"korup": "korupsi",
"kowe": "kamu",
"kpai": "komisi perlindungan anak indonesia",
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"kpai": "komisi pemberantas koruptor",
"kpai": "kapan",
"kpai": "keputusan",
"kpai": "keren",
"kpai": "garing",
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"kpai": "kirim",

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"krn": "karena",
"ksadaran": "kesadaran",
"kt": "kita",
"ktauan": "ketahuan",
"ktipu": "tipu",
"ktk": "ketika",
"ktmu": "ketemu",
"ktny": "katanya",
"ktp": "kartu tanda penduduk",
"ktr": "kantor",
"kudu": "harus",
"kuiper": "kurang pergaulan",
"kuq": "kok",
"kurng": "kurang",
"kw": "imitasi",
"kwn": "kawan",
"ky": "seperti",
"kyk": "seperti",
"kykny": "kayanya",
"la": "lah",
"laka": "kecelakaan",
"laki2": "laki-laki",
"lam": "salam",
"lambreta": "lambat",
"lamp": "lampiran",
"langi": "langit",
"lansia": "lanjut usia",
"lanud": "landasan udara",
"lapas": "lembaga pemasyarakatan",
"larang2": "larang-larang",
"latgab": "latihan gabungan",
"lawyer2": "lawyer lawyer",
"lbh": "lebih",
"lbur": "libur",
"lebay": "berlebihan",
"leh": "boleh",
"lekong": "laki-laki",
"lelet": "lambat",
"lemot": "lemah otak",
"lesbia": "lesbian",
"less": "kurang",
"lg": "lagi",
"lgi": "lagi",
"lgkp": "lengkap",
"lgsg": "langsung",
"lha": "lah",
"lht": "lihat",
"liat": "lihat",
"light": "terang",
"linmas": "perlindungan masyarakat",
"litbang": "penelitian dan pengembangan",
"liwat": "lewat",
"lknt": "laknat",
"lmyan": "lumayan",
"lmyn": "lumayan",
"lngkp": "lengkap",
"lo": "kamu",
"loch": "loh",
"loe": "kamu",

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"lol": "tertawa",
"lola": "lambat berfikir",
"lom": "belum",
"loup": "cinta",
"loupz": "cinta",
"low": "kalau",
"lowh": "kamu",
"lp": "lupa",
"lsm": "lembaga swadaya masyarakat",
"lu": "kamu",
"luber": "langsung, umum, bebas, dan rahasia",
"luchu": "lucu",
"luchuw": "lucu",
"luff": "cinta",
"lum": "belum",
"luph": "cinta",
"luthu": "lucu",
"luv": "love",
"lw": "kamu",
"lwn": "lawan",
"lwt": "lewat",
"lyf": "live",
"ma": "sama",
"maacih": "terima kasih",
"maaciw": "terima kasih",
"mabal": "bolos",
"mabes": "markas besar",
"macem": "macam",
"macem-macem": "macam-macam",
"macet2an": "macet-macetan",
"macih": "masih",
"madesu": "masa depan suram",
"maem": "makan",
"maen": "main",
"magabut": "makan gaji buta",
"mahatma": "maju sehat bersama",
"maho": "homo",
"majority": "mayoritas",
"mak": "ibu",
"mak jang": "kaget",
"makasih": "terima kasih",
"maksain": "memaksa",
"malah": "bahkan",
"malem": "malam",
"malu2in": "memalukan",
"mam": "makan",
"mamz": "makan",
"mana2": "mana-mana",
"maneh": "kamu",
"manen": "panen",
"manggil": "panggil",
"manies": "manis",
"maniez": "manis",
"mantabss bagus": "",
"mantep": "mantap",
"mao": "mau",
"maren2": "kemarin-kemarin",
"markus": "makelar kasus",
"masama": "sama - sama",

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"masing2": "masing-masing",
"masukin": "masukkan",
"masy": "masyarakat",
"mati2": "mati-mati",
"maybe": "mungkin",
"mb": "mbak",
"mba": "mbak",
"mbabibuta": "ceroboh",
"mbahas": "membahas",
"mbaur": "baur",
"mbelain": "belain",
"mbual": "membual",
"mcm": "macam",
"mdh": "mudah",
"mdh2an": "mudah-mudahan",
"medsos": "media sosial",
"melayakni": "melayani",
"melu": "ikut",
"mencarut2": "mencarut",
"mending": "lebih baik",
"mendpt": "mendapat",
"menjdi": "menjadi",
"menklarifikasi": "mengklarifikasi",
"menolak": "tolak",
"menpora": "menteri pemuda dan olahraga",
"menristek": "mentri riset, teknologi dan pendidikan",
"mensos": "menteri sosial",
"mepet": "dekat sekali",
"mesjid": "masjid",
"met": "selamat",
"metro": "metropolitan",
"mga": "moga",
"mgkin": "mungkin",
"mgkn": "mungkin",
"mgu": "minggu",
"mhn": "mohon",
"migas": "minyak dan gas bumi",
"miker": "minuman keras",
"mikol": "minuman beralkohol",
"milis": "mailing list",
"miras": "minuman keras",
"miumi": "majelis intelektual dan ulama muda indonesia",
"mjadikan": "menjadikan",
"mjd": "menjadi",
"mkud": "maksud",
"mlah": "malah",
"mlalui": "melalui",
"mlm": "malam",
"mls": "malas",
"mmbuat": "membuat",
"mmg": "memang",
"mmng": "memang",
"mndukung": "mendukung",
"mngajarkan": "mengajarkan",
"mngkn": "mungkin",
"mninggal": "meninggal",
"mnipu": "tipu",
"mnjd": "menjadi",
"mnolak": "tolak",

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"mrtrtu": "menurutmu",
"mnt": "minta",
"mnyumbang": "menyumbang",
"mo": "mau",
"modar": "mati",
"moga": "semoga",
"moge": "motor gede",
"mokad": "mati",
"mokat": "mati",
"moso": "masa",
"mosok": "masa",
"most": "paling",
"mpe": "sampai",
"mpr": "majelis permusyawaratan rakyat",
"mrk": "mereka",
"msh": "masih",
"msk": "masuk",
"mskpn": "meskipun",
"mslh": "masalah",
"msg2": "masing-masing",
"msuh": "musuh",
"mt": "makan teman",
"muahal": "mahal",
"mubes": "musyawarah besar",
"mui": "majelis ulama indonesia",
"muker": "musyawarah kerja",
"mulu": "melulu",
"mumet": "pusing",
"mumpung": "selagi",
"muna": "munafik",
"munas": "musyawarah nasional",
"munaslub": "musyawarah nasional luar biasa",
"munfik": "munafik",
"muntaber": "muntah dan berak",
"musda": "musyawarah daerah",
"musti": "mesti",
"muter2": "muter-muter",
"muup": "maaf",
"muupz": "maaf",
"muuv": "maaf",
"mw": "now watching",
"mz": "mas",
"n": "dan",
"na": "nya",
"naas": "nahas",
"nak": "hendak",
"nal": "kenal",
"nan": "dan",
"nanam": "menanam",
"nangis": "menangis",
"nanya": "bertanya",
"naon": "apa",
"napa": "kenapa",
"napi": "narapidana",
"napol": "narapidana politik",
"napza": "narkotika, alkohol, psikotropika, dan zat adiktif",
"naq": "anak",
"narkoba": "narkotika, psikotropika, dan obat terlarang",
"narsis": "bangga pada diri sendiri",

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"nasgor": "nasi goreng",
"nax": "anak",
"nda": "tidak",
"ndak": "tidak",
"ndiri": "sendiri",
"ndut": "gendut",
"ne": "ini",
"negri": "negeri",
"nekolim": "neokolonialisme",
"nekolin": "neokolonialisme",
"nelfon": "menelepon",
"nembak": "menyatakan cinta",
"next": "lanjut",
"ngabis2in": "menghabiskan",
"ngabuburit": "menunggu berbuka puasa",
"ngakak": "tertawa",
"ngaku": "mengaku",
"ngambek": "marah",
"ngambil": "mengambil",
"ngampus": "pergi ke kampus",
"ngamuk2": "ngamuk-ngamuk",
"nganggur": "tidak punya pekerjaan",
"ngantri": "mengantri",
"ngapah": "kenapa",
"ngapain": "sedang apa",
"ngaret": "terlambat",
"ngaruh": "berpengaruh",
"ngasih": "memberikan",
"ngawur": "berbicara sembarangan",
"ngebandel": "berbuat bandel",
"ngebully": "intimidasi",
"ngeceng": "kumpul bareng-bareng",
"ngegosip": "bergosip",
"ngeh": "sadar",
"ngehe": "kesal",
"ngeklaim": "mengklaim",
"ngekos": "tinggal di kos",
"ngeksis": "menjadi eksis",
"ngelamar": "melamar",
"ngeles": "berkilah",
"ngeliat": "melihat",
"ngelidur": "menggigau",
"ngemeng": "bicara terus-terusan",
"ngentot": "senggama",
"ngentotin": "senggama",
"ngerampok": "merampok",
"ngeri": "seram",
"ngerti": "mengerti",
"ngga": "tidak",
"nggak": "tidak",
"ngibul": "berbohong",
"ngikut": "ikut",
"ngiler": "mau",
"nginep": "menginap",
"ngiri": "iri",
"ngisi": "mengisi",
"ngisiin": "mengisikan",
"ngmg": "bicara",
"ngmng": "bicara",

```

"ngn": "dengan",  
 "ngo": "non governmental organization",  
 "ngocol": "lucu",  
 "ngomong": "bicara",  
 "ngomongin": "membicarakan",  
 "ngubek2": "mencari-cari",  
 "ngumpet": "sembunyi",  
 "ngumpul": "berkumpul",  
 "ngurus": "mengurus",  
 "ngusir2": "usir-usir",  
 "nh": "nih",  
 "ni": "ini",  
 "nice": "bagus",  
 "nie": "ini",  
 "niech": "nih",  
 "nih": "ini",  
 "nikahkah": "nikahkan",  
 "nimbrung": "ikut serta",  
 "nipu": "tipu",  
 "nitizen": "netizen",  
 "niyh": "nih",  
 "nk": "ingin",  
 "nkah": "nikah",  
 "nmenarik": "menarik",  
 "nmr": "nomor",  
 "nnt": "nanti",  
 "nnti": "nanti",  
 "nntn": "nonton",  
 "no": "nomor",  
 "nobar": "nonton bareng",  
 "nongkrong": "kumpul-kumpul",  
 "np": "now playing",  
 "nrp": "narapidana",  
 "ntap": "mantap",  
 "ntar": "sebentar",  
 "ntn": "nonton",  
 "nu": "nahdatul ulama",  
 "nuhun": "terima kasih",  
 "numpuk": "bertumpuk",  
 "nunggu": "menunggu",  
 "nutupin": "menutupi",  
 "ny": "nya",  
 "nyaingin": "saing",  
 "nyalahin": "salah",  
 "nyampah": "membuat sampah",  
 "nyampyr": "nyampur",  
 "nyang": "yang",  
 "nyari": "mencari",  
 "nyariin": "mencari",  
 "nyasar": "tersesat",  
 "nyekar": "menyekar",  
 "nyela": "cela",  
 "nyembah": "sembah",  
 "nyemot": "ambil",  
 "nyerang": "serang",  
 "nyiapin": "mempersiapkan",  
 "nyicil": "mencicil",  
 "nyiram": "menyiram",  
 "nympr": "nyampur",

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"nyoblos": "mencoblos",
"nyok": "ayo",
"nyokap": "ibu",
"o": "oleh",
"o/": "oleh",
"odmk": "orang dengan masalah kejiwaan",
"ogah": "tidak mau",
"oia": "oh iya",
"ok": "ok",
"okt": "oktober",
"ol": "online",
"omdo": "omong doang",
"omg": "oh my god",
"omong2": "ngomong-ngomong",
"ongkir": "ongkos kirim",
"oon": "bodoh",
"oot": "out of topic",
"orange": "oranye",
"org": "orang",
"org2": "orang-orang",
"orglaen": "orang lain",
"orkes": "olahraga dan kesehatan",
"ortu": "orang tua",
"ospek": "orientasi studi dan pengenalan kampus",
"otda": "otonomi daerah",
"otre": "ok",
"otw": "on the way, sedang di jalan",
"our": "kami",
"p": "per",
"p.s": "pesan",
"p0rn": "porno",
"pa": "apa",
"pacal": "pacar",
"pahe": "paket hemat",
"pake": "pakai",
"pakek": "pakai",
"pala": "kepala",
"panja": "panitia kerja",
"pansus": "panitia khusus",
"pantura": "pantai utara",
"paranoid": "takut",
"parno": "takut",
"parpol": "partai politik",
"parte": "partai",
"pas2an": "pas-pasan",
"pasutri": "pasangan suami istri",
"patas": "cepat dan terbatas",
"pd": "pada",
"pdhl": "padahal",
"pdip": "partai demokrasi Indonesia perjuangan",
"pdkji": "perhimpunan dokter spesialis kedokteran jiwa indonesia",
"pdt": "padat",
"pecahan2": "pecahan-pecahan",
"pede": "percaya diri",
"pelanggarab": "pelanggaran",
"pelatda": "pemusatan latihan daerah",
"pelatnas": "pemusatan latihan nasional",
"pelcehn": "pelecehan",

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"pembokat": "pembantu",  
 "pemda": "pemerintah daerah",  
 "pemilu": "pemilihan umum",  
 "pemko": "pemerintah kota",  
 "pemkot": "pemerintah kota",  
 "pemprov": "pemerintah provinsi",  
 "pemred": "pemimpin redaksi",  
 "pendukung2": "pendukung-pendukung",  
 "penertiban": "tertib",  
 "pengen": "ingin",  
 "penjas": "pendidikan jasmani",  
 "penmas": "pendidikan masyarakat",  
 "perda": "peraturan daerah",  
 "perek": "wanita tuna susila",  
 "peremp": "perempuan",  
 "pergub": "peraturan gubernur",  
 "perhatiin": "perhatikan",  
 "pertamax": "pertama",  
 "pesenan": "pesanan",  
 "pesenin": "pesankan",  
 "pgang": "pegang",  
 "pgi": "pergi",  
 "pi": "tapi",  
 "pihak2": "pihak pihak",  
 "pijetin": "pijitkan",  
 "pilgub": "pemilihan gubernur",  
 "pilkada": "pemilihan kepala daerah",  
 "pimpro": "pemimpin proyek",  
 "pinter2": "pintar-pintar",  
 "pisan": "sangat",  
 "pisgor": "pisang goreng",  
 "pk": "penjahat kelamin",  
 "pke": "pakai",  
 "pket": "paket",  
 "pkr": "pakar",  
 "pks": "partai keadilan sejahtera",  
 "plg": "paling",  
 "plh": "pilih",  
 "pls": "tolong",  
 "pm": "private message",  
 "pmhaman": "pemahaman",  
 "pmrnth": "pemerintah",  
 "pndkung": "pendukung",  
 "pndukung": "pendukung",  
 "pnjilat": "penjilat",  
 "pns": "pegawai negeri sipil",  
 "pny": "punya",  
 "poin2": "poin-poin",  
 "polantas": "polisi lalu lintas",  
 "polda": "kepolisian daerah",  
 "polres": "kepolisian resor",  
 "polwan": "polisi wanita",  
 "pon": "juga",  
 "ponpes": "pondok pesantren",  
 "ponsel": "telepon seluler",  
 "poster2": "poster-poster",  
 "pp": "pulang pergi",  
 "ppa": "apa",  
 "presh": "segar",

```

"prg": "pergi",
"prikitiw": "cie",
"priksa": "periksa",
"prilaku": "perilaku",
"prnh": "pernah",
"pro": "profesional",
"problem": "masalah",
"prototype": "contoh",
"prov": "provinsi",
"psen": "pesan",
"psn": "pesan",
"psr": "pasar",
"pst": "pasti",
"psti": "pasti",
"pswt": "pesawat",
"ptemuan": "pertemuan",
"puanas": "panas",
"pulgar": "kasar",
"puskesmas2": "puskesmas-puskesmas",
"puyeng": "pusing",
"pw": "posisi nyaman",
"qmo": "kamu",
"qmu": "kamu",
"qt": "kita",
"rakor": "rapat koordinasi",
"rame": "ramai",
"rang": "orang",
"ranmor": "kendaraan bermotor",
"raskin": "rakyat miskin",
"rata2": "rata-rata",
"re": "reply",
"red": "redaksi",
"ref": "referensi",
"reg": "register",
"rehab": "rehabilitasi",
"rejek": "rezeki",
"rekan2": "rekan-rekan",
"reklamuk": "reklamasi",
"rempah2": "rempah-rempah",
"rempong": "sulit",
"renstra": "rencana strategis",
"repp": "balas",
"reskrim": "reserse kriminal",
"restik": "reserse narkotika",
"rhs": "rahasia",
"rights": "benar",
"rja": "raja",
"rkyt": "rakyat",
"rmbt": "rambut",
"rmh": "rumah",
"rofl": "rolling on the floor laughing",
"ru": "baru",
"rubahnn": "rubah",
"rudal": "peluru kendali",
"ruko": "rumah toko",
"rusun": "rumah susun",
"rusunawa": "rumah susun sewa",
"rutan": "rumah tahanan",
"ruu": "rancangan undang-undang",

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```

"ruz": "terus",
"rwt": "rawat",
"s4": "sempat",
"sadaar": "sadar",
"sah2": "sah-sah",
"saia": "saya",
"saiank": "sayang",
"salting": "salah tingkah",
"saltum": "salah kostum",
"sampe": "sampai",
"sampeyan": "anda",
"samsek": "sama sekali",
"sapa": "siapa",
"sapose": "siapa",
"satkorlak": "satuan koordinator pelaksana",
"satpam": "satuan pengamanan",
"say": "sayang",
"sayan": "sayang",
"sbaliknya": "sebaliknya",
"sbb": "sebagai berikut",
"sbg": "sebagai",
"sbggn": "sebagian",
"sbh": "sebuah",
"sblm": "sebelum",
"sbnr": "sebenar",
"sbnrny": "sebenarnya",
"sbntr": "sebentar",
"scara": "secara",
"scr": "secara",
"sdg": "sedang",
"sdgkn": "sedangkan",
"sdh": "sudah",
"sdk": "sedikit",
"sdkgn": "sedangkan",
"se7": "setuju",
"seabrek": "banyak",
"sebelas dua belas": "mirip",
"sebelum": "sebelum",
"sebgmn": "sebagaimana",
"sebuk": "sibuk",
"sekjen": "sekretaris jenderal",
"selaen": "selain",
"selmt": "selamat",
"semau": "asal",
"sembako": "sembilan bahan pokok",
"sempak": "celana dalam",
"sempet": "sempat",
"sempet2nya": "sempat-sempatnya",
"sendratar": "seni drama tari",
"seorg": "seorang",
"sept": "september",
"serasiii": "serasi",
"sertijab": "serah terima jabatan",
"sesok": "besok",
"seting": "akting",
"setting": "atur",
"sgl": "segala",
"sgrc": "support group and resource center",
"sgt": "sangat",

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```

"sgtunya": "segitunya",
"shg": "sehingga",
"shrsnya": "seharusnya",
"siap2": "siap-siap",
"sidak": "inspeksi mendadak",
"siech": "sih",
"sieyh": "sih",
"sigh": "sih",
"sik": "sih",
"sikon": "situasi dan kondisi",
"simiskin": "miskin",
"simpedes": "simpanan pedesaan",
"sinetron": "sinema elektronik",
"sip": "ok",
"siramin": "siramkan",
"sis": "kakak perempuan",
"sj": "saja",
"sjk": "sejak",
"skali": "sekali",
"skalian": "sekalian",
"skl": "sekali",
"sklh": "sekolah",
"skrg": "sekarang",
"skt": "sakit",
"skul": "sekolah",
"slalu": "selalu",
"slama": "selama",
"slesai": "selesai",
"slh": "salah",
"sll": "selalu",
"sllu": "selalu",
"slm": "salam",
"slma": "selama",
"slmt": "selamat",
"slsai": "selesai",
"slt": "sulit",
"sm": "sama",
"sma": "sama",
"smg": "semoga",
"smkn": "semakin",
"smpt": "sempat",
"smua": "semua",
"smw": "semua",
"smwny": "semuanya",
"sndiri": "sendiri",
"sng": "senang",
"sni": "sini",
"soft": "halus",
"sohib": "teman",
"sokong": "dukung",
"soljum": "sholat jumat",
"solve": "solusi",
"somse": "sombong sekali",
"songong": "sombong",
"sorry": "maaf",
"sory": "maaf",
"sosbud": "sosial-budaya",
"sosek": "sosial-ekonomi",
"sospol": "sosial-politik",

```

```

"sotoy": "sok tahu",
"sowry": "maaf",
"spa": "siapa",
"spd": "sepeda",
"sppa": "siapa",
"sprti": "seperti",
"spt": "seperti",
"spy": "supaya",
"srt": "surat",
"srtfkt": "sertifikat",
"stelah": "setelah",
"stiap": "setiap",
"still": "masih",
"stlh": "setelah",
"stop": "henti",
"subbag": "subbagian",
"suk": "masuk",
"sumbangin": "sumbangkan",
"sumpek": "sempit",
"sy": "saya",
"sya": "saya",
"syg": "sayang",
"syp": "siapa",
"t4": "tempat",
"tabanas": "tabungan pembangunan nasional",
"tahi": "kotoran",
"tai": "kotoran",
"taik": "tahi",
"tajir": "kaya",
"tak": "tidak",
"tar": "nantinya",
"tarik2": "tarik-tarik",
"tau": "tahu",
"tauk": "tahu",
"taun": "tahun",
"taw": "tahu",
"tawh": "tahu",
"tayangan2": "tayangan-tayangan",
"td": "tadi",
"tdi": "tadi",
"tdk": "tidak",
"te2p": "tetap",
"teh": "kakak perempuan",
"teken": "tekan",
"tekor": "rugi",
"telat": "terlambat",
"telkom": "telekomunikasi",
"telmi": "telat berpikir",
"telp": "telepon",
"teman2": "teman-teman",
"temen": "teman",
"temen2": "teman-teman",
"tenang2": "tenang tenang",
"tengil": "menyebalkan",
"tengok": "menjenguk",
"tepar": "terkapar",
"terbitin": "terbitkan",
"tetp": "tetap",
"teve": "televisi",

```

```

"tggg": "tunggu",
"tgl": "tanggal",
"tgok": "tengok",
"tgu": "tunggu",
"thanks": "terima kasih",
"thankz": "terima kasih",
"thd": "terhadap",
"thdp": "terhadap",
"thn": "tahun",
"thx": "thanks",
"tilang": "bukti pelanggaran",
"tilep": "tilap",
"tioghoa": "tionghoa",
"tipi": "TV",
"tipiwan": "TvOne",
"tirani": "tiran",
"tk": "tidak",
"tkg": "tukang",
"tkz": "terima kasih",
"tl": "timeline",
"tll": "terlalu",
"tlp": "telepon",
"tlpn": "telepon",
"tls": "tuliskan",
"tman": "teman",
"tmbah": "tambah",
"tmbh": "tambah",
"tmen2": "teman-teman",
"tmn": "teman",
"tmn2": "teman-teman",
"tmpah": "tumpah",
"tmph": "tumpah",
"tmpt": "tempat",
"tnda": "tanda",
"tngu": "tunggu",
"tnh": "tanah",
"tni": "tentara nasional indonesia",
"tnp": "tanpa",
"tntg": "tentang",
"tnya": "tanya",
"tnyta": "ternyata",
"togel": "toto gelap",
"tokai": "tai",
"tokoh2": "tokoh-tokoh",
"toserba": "toko serba ada",
"toys": "mainan",
"tp": "tapi",
"tpi": "tetapi",
"tq": "terima kasih",
"trdhulu": "terdahulu",
"tren": "trend",
"trending": "trend",
"trfkir": "terfikir",
"trgntg": "tergantung",
"trh": "terhadap",
"trhdp": "terhadap",
"trima": "terima kasih",
"trims": "terima kasih",
"trimz": "terima kasih",

```

```

"trkhr": "terakhir",
"trlalu": "terlalu",
"trllu": "terlalu",
"trm": "terima",
"trmsk": "termasuk",
"trnyt": "ternyata",
"trs": "terus",
"trus": "terus",
"trutama": "terutama",
"trz": "terus",
"ts": "penulis",
"tsangka": "tersangka",
"tsb": "tersebut",
"tsk": "tersangka",
"tst": "tahu sama tahu",
"ttd": "tertanda",
"ttg": "tentang",
"ttng": "tentang",
"ttp": "tetap",
"tu": "itu",
"tuch": "tuh",
"tuh": "itu",
"tuir": "tua",
"tuwh": "tuh",
"tv": "televisi",
"tw": "tahu",
"twit2": "tweet-tweet",
"twt": "tweet",
"tyap": "tiap",
"u": "untuk",
"u/": "untuk",
"uasai": "kuasa",
"ud": "sudah",
"uda": "sudah",
"udah": "sudah",
"udh": "sudah",
"ugm": "universitas gajah mada",
"ui": "universitas indonesia",
"ujg": "ujung",
"ujung2nya": "ujung-ujungnya",
"ul": "ulangan",
"ultah": "ulang tahun",
"unair": "universitas airlangga",
"undang2": "undang undang",
"undip": "universitas diponegoro",
"univ": "universitas",
"unyu": "menggemaskan",
"uplot": "unggah",
"uppu": "apa",
"urang": "saya",
"urg": "saya",
"usah": "perlu",
"ust": "ustadz",
"ut": "untuk",
"utang": "hutang",
"utip": "kutip",
"utk": "untuk",
"utul": "ujian tertulis",
"uu": "undang-undang",

```

```

"valas": "valuta asing",
"valid": "sah",
"victory": "menang",
"vol": "volume",
"vote": "pilih",
"w/": "dengan",
"wad": "buat",
"wadir": "wakil direktur",
"wagub": "wakil gubernur",
"wamil": "wajib militer",
"war": "perang",
"warbiyasak": "luar biasa",
"waria": "wanita pria",
"warkop": "warung kopi",
"warnet": "warung internet",
"warteg": "warung tegal",
"wartel": "warung telekomunikasi",
"waspadalah": "waspada",
"wat": "buat",
"watuk": "batuk",
"who": "world health organization",
"wk": "tertawa",
"wkt": "waktu",
"wkwk": "tertawa",
"wkwkkw": "tertawa",
"wtf": "what the fuck",
"wth": "what the hell",
"x": "tidak",
"xan": "tak akan",
"xew": "apa",
"xixixi": "tertawa",
"y": "ya",
"ya": "iya",
"yad": "yang akan datang",
"yap": "iya",
"yapz": "iya",
"yaudah": "ya sudah",
"yauwda": "ya sudah",
"yawdah": "ya sudah",
"ybs": "yang bersangkutan",
"yg": "yang",
"yi": "yaitu",
"yl": "yang lain",
"yng": "yang",
"yo": "iya",
"yoha": "iya",
"yowes": "ya sudah",
"yuk": "ayo",
"yup": "iya",
"ywdh": "ya sudah",
"zonk": "bodoh"
}

```

## 18. models/indonesia/spell.py

```

import json
import pandas as pd

```

```

with open('slang.dic') as f:
    slang = json.load(f)

kamus_slang = pd.read_json('slang.dic', typ = 'series')
pd.DataFrame(kamus_slang.items(), columns = ['contraction',
'original']).head()
contractions_list = list(kamus_slang.keys())

def spell_check(text):
    words = []
    for word in text.split():
        if word in contractions_list:
            words = words + kamus_slang[word].split()
        else:
            words = words + word.split()

    text_converted = " ".join(words)
    return text_converted

```

## 19. public/css/master.css

```

/* ELEMENTS */

textarea.form-control {
    height: 40vmin;
}

/* CLASSES */

.form_language {
    /* display: block; */
    /* width: 100%; */
    padding: 0.375rem 2.25rem 0.375rem 0.75rem;
    -moz-padding-start: calc(0.75rem - 3px);
    font-size: 1rem;
    font-weight: 400;
    line-height: 1.5;
    color: #212529;
    background-color: #fff;
    background-image: url("data:image/svg+xml,%3csvg
xmlns='http://www.w3.org/2000/svg' viewBox='0 0 16 16'%3e%3cpath
fill='none' stroke='%23343a40' stroke-linecap='round' stroke-
linejoin='round' stroke-width='2' d='m2 5 6 6 6-6'/%3e%3c/svg%3e");
    background-repeat: no-repeat;
    background-position: right 0.75rem center;
    background-size: 16px 12px;
    border: 1px solid #ced4da;
    border-radius: 0.375rem;
    transition: border-color 0.15s ease-in-out, box-shadow 0.15s ease-
in-out;
    -webkit-appearance: none;
    -moz-appearance: none;
    appearance: none;
}

@media (prefers-reduced-motion: reduce) {
    .form_language {

```

```

        transition: none;
    }
}

.help_icon {
    margin-left: auto;
    width: fit-content;
}

.score_line {
    width: 100%;
}

.select_local {
    width: fit-content;
}

.service_explanation {
    text-align: justify;
    margin: 1rem;
}

```

## 20. public/js/milisecondDate.js

```

let documentID = new Date().getMilliseconds();

document.getElementById("docid").value = documentID;

```

## 21. public/js/printResult.js

```

document.getElementById("print").addEventListener("click", () => {
    document.getElementById("print").style.opacity = 0;
    window.print();
    document.getElementById("print").style.opacity = 1;
    // setTimeout(() => {
    // }, 1000);
});

```

## 22. public/pages/bulkID1.html

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>

    <!-- Bootstrap CSS -->
    <link
      href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css"
      rel="stylesheet"
      integrity="sha384-
KK94CHFLLe+nY2dmCWGMq91rCGa5gtU4mk92HdvYe+M/SXH301p5ILy+dN9+nJOZ "

```

```

        crossorigin="anonymous"
    />

    <!-- our CSS -->
    <link rel="stylesheet" href="/css/master.css" />

    <!-- FontAwesome JS -->
    <script
        src="https://kit.fontawesome.com/6b522f63d7.js"
        crossorigin="anonymous"
    ></script>

    <!-- XLS to JSON -->
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/xlsx/0.16.2/xlsx.full.mi
n.js"></script>
    </head>

    <body>
        <!-- <h2>Header</h2> -->

<div class="container-fluid">
    <div class="row">
        <div class="col col-6"><div>
            <a href="/">
                <h1><i class="fa-solid fa-file-circle-check"></i> A Title</h1>
            </a>
        </div>
    </div>
    <div>
        <div class="col col-6 d-flex justify-content-end mb-5">
            <h1><i class="fa-regular fa-file-excel"></i>Indonesia</h1>
        </div>
    </div>
    <div>
        <p class="form-label">Kunci Jawaban</p>
        <div class="form-control">

```

## 23. public/pages/bulkID2.html

```

</div>
</div>
<!-- <div class="text-center container-fluid">
    <p>Mohon mengisi survey kepuasan anda terhadap Easysay</p>
    <button type="button" class="btn btn-info">
        <a
            href="https://forms.gle/FApH5uzhVbRB4NtY9"
            target="_blank"
            class="link-body-emphasis"
        >Survey 3 menit</a>
    >
    </button>
</div> -->
<div>
    <p class="form-label">Hasil Penilaian</p>
    <div class="row">

```



```

<table class="table">
  <thead>
    <tr>
      <th scope="col">Nama</th>
      <th scope="col">Jawaban</th>
      <th scope="col">Nilai</th>
    </tr>
  </thead>
  <tbody>

```

## 24. public/pages/bulkID3.html

```

</tbody>
</table>
</div>
</div>
</div>
<div class="container-fluid text-center mb-2">
  <button type="button" id="print" class="btn btn-secondary">
    Export to PDF
  </button>
</div>
<script src="js/printResult.js"></script>

<!-- <h3>Footer</h3> -->
<!-- Bootstrap JS -->
  <script
    src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/js/bootstrap.bundle.min.js"
    integrity="sha384-
ENjdO4Dr2bkBIFxQpeoTz1HIcje39Wm4jDKdf19U8gI4ddQ3GYNS7NTKfAdvQSZ"
    crossorigin="anonymous"
  ></script>
</body>

</html>

```

## 25. app.js

```

const express = require("express");
const bodyParser = require("body-parser");
const path = require("path");
const CSVToJSON = require("csvtojson");
const JSONToCSV = require("json2csv").parse;
var fs = require("fs");
const { PythonShell } = require("python-shell");
const multer = require("multer");

let bulkDocumentID;
const storage = multer.diskStorage({
  destination: (req, file, cb) => {
    cb(null, "./");
  },
  filename: (req, file, cb) => {
    bulkDocumentID = new Date().getMilliseconds();
    cb(null, bulkDocumentID + ".csv");
  }
});

```

```

    },
  });
  const upload = multer({ storage: storage });

  const app = express();

  app.set("views", [path.join(__dirname, "views")]);
  app.set("view engine", "ejs");

  app.use(bodyParser.urlencoded({ extended: true, limit: "50mb" }));
  app.use(express.static("public"));
  app.use(express.json({ limit: "50mb" }));

  app.get("/", (req, res) => {
    res.render("home/home");
  });

  app.get("/help", (req, res) => {
    res.render("help/help");
  });

  app.route("/option").post((req, res) => {
    const obj = {
      language: req.body.language,
      select: req.body.select,
    };
    if (obj.language === "Indonesia") {
      if (obj.select === "single") {
        res.render("indonesia/single", { language: obj.language });
      } else {
        res.render("indonesia/bulkJQuery");
      }
    } else if (obj.language === "Inggris") {
      if (obj.select === "single") {
        res.render("inggris/single");
      } else {
        res.render("inggris/bulk");
      }
    } else {
      res.redirect("/");
    }
  });

  app.post("/ens", (req, res) => {
    const keyAnswer = req.body.teacherAnswer;
    const answer = req.body.studentAnswer;
    const language = req.body.language;
    const docid = req.body.docid;

    let Dataset =
      `keyAnswer,studentAnswer\n"${keyAnswer}","${answer}"`;

    let scoreLoad;

    fs.writeFileSync(docid + ".csv", Dataset, "utf8");

    let options = {
      mode: "json",
      pythonOptions: ["-u"],
    };
  });

```

```

    args: [docid],
  };

PythonShell.run("models/english/aprilModel.py", options)
  .then((messages) => {
    scoreLoad = messages;
  })
  .then(() => {
    fs.unlink(docid + ".csv", (err) => {
      //delete the csv file from crowding
      if (err) throw err;
    });
  })
  .then(() => {
    res.render("result/singleResult", {
      language: language,
      keyAnswer: scoreLoad[0].keyAnswer["0"],
      answer: scoreLoad[0].studentAnswer["0"],
      score: ((scoreLoad[0].scoreModelStem["0"] / 5) *
100).toFixed(2) + "%",
    });
  })
  .catch((err) => {
    res.render("result/singleResult", {
      language: language,
      keyAnswer: keyAnswer,
      answer: answer,
      score:
        "Submitted paragraphs may not contain meaningful words for
the app to check, so we cannot continue the calculation",
    });
  });
});

app.post("/enb", upload.single("studentAnswers"), (req, res) => {
  const keyAnswer = req.body.teacherAnswer;
  const studentNames = req.body.nameColumns;
  const answerColumns = req.body.answerColumns;
  const language = req.body.language;
  let docid = bulkDocumentID;
  let scoreLoad;

  CSVToJSON()
    .fromFile("./" + docid + ".csv")
    .then((source) => {
      for (let i = 0; i < source.length; i++) {
        source[i].keyAnswer = keyAnswer;
        source[i].studentAnswer = source[i][answerColumns];
        source[i].studentName = source[i][studentNames];
      }
      const csv = JSONToCSV(source);
      fs.writeFileSync(docid + ".csv", csv);

      let options = {
        mode: "json",
        pythonOptions: ["-u"],
        args: [docid],
      };

```

```

    PythonShell.run("models/english/aprilModel.py", options)
    .then((messages) => {
        scoreLoad = messages;
    })
    .then(() => {
        fs.unlink(docid + ".csv", (err) => {
            if (err) throw err;
        });
    })
    .then(() => {
        res.render("result/bulkResult", {
            language: language,
            keyAnswer: keyAnswer,
            givenObjectKeyLength:
Object.keys(scoreLoad[0].studentName).length,
            objectName: scoreLoad[0].studentName,
            objectAnswer: scoreLoad[0].studentAnswer,
            objectScore: scoreLoad[0].scoreModelStem,
        });
    });
});
});

app.post("/ids", (req, res) => {
    const { language, teacherAnswer, studentAnswer, docid } =
req.body;

    let option = {
        mode: "text",
        pythonOptions: ["-u"],
        args: [teacherAnswer, studentAnswer, docid],
    };

    PythonShell.run("./models/indonesia/ASAG.py",
option).then((messages) => {
        let txtfile = fs
            .readFileSync(docid + ".txt", "utf-8")
            .replace(/\r/g, "")
            .split("\n");

        fs.unlink(docid + ".txt", (err) => {
            if (err) throw err;
        });
        res.render("result/singleResult", {
            language: language,
            keyAnswer: teacherAnswer,
            score: txtfile[0] + "%",
            answer: studentAnswer,
        });
    });
});

app.post("/idbulk", upload.single("studentAnswers"), async (req,
res) => {
    const { teacherAnswer, nameColumns, answerColumns, language } =
req.body;
    let docid = bulkDocumentID;

    let idbulk1 = fs.readFileSync("public/pages/bulkID1.html", "utf-

```

```

8");
let idbulk2 = fs.readFileSync("public/pages/bulkID2.html", "utf-
8");
let idbulk3 = fs.readFileSync("public/pages/bulkID3.html", "utf-
8");

res.write(idbulk1);
res.write("<p>");
res.write(teacherAnswer);
res.write("</p>");
res.write(idbulk2);

const sources = await CSVToJSON().fromFile("./" + docid + ".csv");

if (
  sources[0][nameColumns] == undefined &&
  sources[0][answerColumns] == undefined
) {
  fs.unlink(docid + ".csv", (err) => {
    if (err) throw err;
  });
  res.write(
    '<div class="alert alert-warning" role="alert">Kolom Nama dan
/ atau kolom jawaban pelajar sepertinya tidak cocok dengan apa yang
ada di file CSV, mohon di cek lagi karena harus sama persis
namanya</div>'
  );
  res.end();
} else {
  for (i = 0; i < sources.length; i++) {
    sources[i].studentName = sources[i][nameColumns];
    sources[i].studentAnswer = sources[i][answerColumns];
  }
  for (let i = 0; i < sources.length; i++) {
    const options = {
      mode: "text",
      pythonOptions: ["-u"],
      args: [teacherAnswer, sources[i][answerColumns], docid],
    };
    await PythonShell.run("./models/indonesia/ASAGbulk.py",
options).then(
      (messages, err) => {
        console.log("error LINE 267");
        res.write("<tr>");
        res.write("<td>");
        res.write(sources[i].studentName);
        res.write("</td>");
        res.write("<td>");
        res.write(sources[i].studentAnswer);
        res.write("</td>");
        res.write("<td>");
        res.write(messages[0]);
        res.write("</td>");
        res.write("</tr>");
        res.write("<br />");
      }
    );
  }
  res.write(idbulk3);

```

```

    fs.unlink(docid + ".csv", (err) => {
      if (err) throw err;
    });
    res.end();
  }
});

app.route("/ScenarioEn").post((req, res) => {
  const { key, ans } = req.body; //json recieved from postman has
  key and ans, put in their own variable

  let Dataset = `keyAnswer,studentAnswer\n"${key}","${ans}"`;

  fs.writeFileSync("ScenarioEn.csv", Dataset, "utf8");

  let options = {
    mode: "json",
    pythonOptions: ["-u"],
    args: ["ScenarioEn"],
  };

  PythonShell.run("models/english/aprilModel.py",
options).then((messages) => {
    // res.send((messages[0].scoreModelStem["0"] / 5) *
100).toFixed(2) + "%");
    // code above is to send just the score in a 0 to 100% percent
range
    res.send(messages);
    // code above is to send the whole scoring processes as the
model does
  });
});

app.route("/ScenarioEnTab").post((req, res) => {
  const { key } = req.body;

  CSVToJSON()
    .fromFile("./dataset.csv")
    .then((source) => {
      for (let i = 0; i < source.length; i++) {
        source[i].keyAnswer = key;
      }
      const csv = JSONToCSV(source);
      fs.writeFileSync("dataset.csv", csv);

      let options = {
        mode: "json",
        pythonOptions: ["-u"],
        args: ["dataset"],
      };

      PythonShell.run("models/english/aprilModelTab.py",
options).then(
(messages) => {
        res.send(messages[0].scoreModelStem);
        // res.send(messages);
      }
    );
  });
});

```

```
});

app.route("/ScenarioId").post((req, res) => {
  const { key, ans } = req.body; //json recieved from postman has
  key and ans, put in their own variable

  let option = {
    mode: "text",
    pythonOptions: ["-u"],
    args: [key, ans, "ScenarioId"],
  };

  PythonShell.run("./models/indonesia/ASAG.py",
option).then((messages) => {
    let txtfile = fs
      .readFileSync("ScenarioId" + ".txt", "utf-8")
      .replace(/\r/g, "")
      .split("\n");

    fs.unlink("ScenarioId" + ".txt", (err) => {
      if (err) throw err;
    });
    res.send(txtfile[0] + "%");
  });
});

app.listen(process.env.PORT || 1234, () => {
  console.log("Listening to http://localhost:1234");
});
```

## 26. index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>Easysay</title>
  </head>
  <body>
    <script>
      window.location.href = "http://103.37.125.146:1234/";
    </script>
  </body>
</html>
```

## 27. package-lock.json

```
{
  "name": "product",
  "version": "1.0.0",
  "lockfileVersion": 2,
  "requires": true,
  "packages": {
    "": {
```

```

    "name": "product",
    "version": "1.0.0",
    "license": "ISC",
    "dependencies": {
      "body-parser": "^1.20.1",
      "csv": "^6.3.0",
      "csv-generate": "^4.2.6",
      "csvtojson": "^2.0.10",
      "ejs": "^3.1.8",
      "express": "^4.18.2",
      "formidable": "^2.1.1",
      "json-to-csv-export": "^2.1.1",
      "json2csv": "^6.0.0-alpha.2",
      "localtunnel": "^2.0.2",
      "multer": "^1.4.5-lts.1",
      "nodemon": "^2.0.22",
      "papaparse": "^5.4.1",
      "python-shell": "^5.0.0"
    }
  },
  "node_modules/@streamparser/json": {
    "version": "0.0.6",
    "resolved": "https://registry.npmjs.org/@streamparser/json/-
/json-0.0.6.tgz",
    "integrity": "sha512-
vL9EVn/v+OhZ+Wcs6O4iKE9EUpwHUqHmCtNUMWjqp+6dr85+XPOSGTEsqYNq1Vn04uk9
SWlOVmx9J48ggJVT2Q=="
  },
  "node_modules/abbrev": {
    "version": "1.1.1",
    "resolved": "https://registry.npmjs.org/abbrev/-/abbrev-
1.1.1.tgz",
    "integrity": "sha512-
nne9/IiQ/hzIhY6pdDnbBtz7DjPTKrY00P/zvPSm5pOFkl6xuGrGnXn/VtTNNfNtAfZ9
/1RtehkszU9qcTii0Q=="
  },
  "node_modules/accepts": {
    "version": "1.3.8",
    "resolved": "https://registry.npmjs.org/accepts/-/accepts-
1.3.8.tgz",
    "integrity": "sha512-
PYAthTa2m2VKxuvSD3DPC/Gy+U+sOA1LAuT8mkmRuvw+NACSAeXEQ+NHcVF7rONl6qca
xV3Uuemwawk+7+SJLw==",
    "dependencies": {
      "mime-types": "~2.1.34",
      "negotiator": "0.6.3"
    },
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/ansi-regex": {
    "version": "5.0.1",
    "resolved": "https://registry.npmjs.org/ansi-regex/-/ansi-
regex-5.0.1.tgz",
    "integrity": "sha512-
quJQXlTSUGL2LH9SUXo8VwsY4soanhgo6LNSm84E1LBcE8s3O0wpdiRzyR9z/ZZJmLMW
v37qOOb9pdJlMUEKFQ==",
    "engines": {

```



```

      "node": ">=8"
    },
    "node_modules/ansi-styles": {
      "version": "4.3.0",
      "resolved": "https://registry.npmjs.org/ansi-styles/-/ansi-styles-4.3.0.tgz",
      "integrity": "sha512-7Bz641B438t+Q65dNl8C8f8888b2I5YqZJXh0KUk9JnbX8F8Hk6YDZ6o/sOARUNKtRQsHUfwYDMpL8g==",
      "dependencies": {
        "color-convert": "^2.0.1"
      },
      "engines": {
        "node": ">=8"
      },
      "funding": {
        "url": "https://github.com/chalk/ansi-styles?sponsor=1"
      }
    },
    "node_modules/anymatch": {
      "version": "3.1.3",
      "resolved": "https://registry.npmjs.org/anymatch/-/anymatch-3.1.3.tgz",
      "integrity": "sha512-KMReFUr0B4t+D+OBkjr3KYqvocp2XaSzO55UcB6mgQMd3KbcE+mWTyvVV7D/zsdEbNnV6acZUutkiHQXvTrlRw==",
      "dependencies": {
        "normalize-path": "^3.0.0",
        "picomatch": "^2.0.4"
      },
      "engines": {
        "node": ">= 8"
      }
    },
    "node_modules/append-field": {
      "version": "1.0.0",
      "resolved": "https://registry.npmjs.org/append-field/-/append-field-1.0.0.tgz",
      "integrity": "sha512-klpgFSWLWlZE8svjfb7g4qWY0YS5imI82dTg+QahUvJ8YqAY0P10Uk8tTyh9ZGuYEZE MaeJYCF5BFuX552hsw==",
      "dependencies": {}
    },
    "node_modules/array-flatten": {
      "version": "1.1.1",
      "resolved": "https://registry.npmjs.org/array-flatten/-/array-flatten-1.1.1.tgz",
      "integrity": "sha512-Z3lpaMHYaHnvWniZi5dmE395gkYrF51G18a0938N1ELV60iO89G4S9L9Dy6B8D8UfBk4PeX964X8D1vVw==",
      "dependencies": {}
    },
    "node_modules/asap": {
      "version": "2.0.6",
      "resolved": "https://registry.npmjs.org/asap/-/asap-2.0.6.tgz",
      "integrity": "sha512-1HW2DsRQ1iuA382k1Xr1v4y7JN2l0v9eYUsgMh1k6/qnfjwB90Z93pG5K0VqSgjvDw7o3TG8gWq4zX0zA==",
      "dependencies": {}
    },

```

```

    "node_modules/async": {
      "version": "3.2.4",
      "resolved": "https://registry.npmjs.org/async/-/async-3.2.4.tgz",
      "integrity": "sha512-4P6T7R9x4uYmJsO0wHtIexF5VdFwYgIo65IvB1ePZ1q/30z3SjQ73drZE7/DBq/1dGvS6qLpEgV8Dj4w==",
    },
    "node_modules/axios": {
      "version": "0.21.4",
      "resolved": "https://registry.npmjs.org/axios/-/axios-0.21.4.tgz",
      "integrity": "sha512-OxlQ3oVw1jPnqyqGHxvi9VMp289koKh1jhdzvv46CU6ket38CzrrJezDlBxw99vT9Lrhc9N7tX9qWZ5fjq==",
      "dependencies": {
        "follow-redirects": "^1.14.0"
      }
    },
    "node_modules/balanced-match": {
      "version": "1.0.2",
      "resolved": "https://registry.npmjs.org/balanced-match/-/balanced-match-1.0.2.tgz",
      "integrity": "sha512-3oSeUO0TMV67hN1AmbXsK4yaqU7tjiHlbbxRDZOpH0KW9+CeX4bRAaX0Anxt0tx2MrpRpWwQaPwI1ISEJhYU5Pw==",
    },
    "node_modules/binary-extensions": {
      "version": "2.2.0",
      "resolved": "https://registry.npmjs.org/binary-extensions/-/binary-extensions-2.2.0.tgz",
      "integrity": "sha512-7YqO2XpQ1U2lU0eqxueuP60llXfNfwE1UdOz3PeSgVSD4HO3nzEboUlAAK9pO8b7/2W5vKJn+tmh5si7uQ==",
      "engines": {
        "node": ">=8"
      }
    },
    "node_modules/bluebird": {
      "version": "3.7.2",
      "resolved": "https://registry.npmjs.org/bluebird/-/bluebird-3.7.2.tgz",
      "integrity": "sha512-XpNj6GDQzdfW+r2Wnn7xiSAd7TM3jzcxGXBGTTWkuSXv1xUV+azxAm8jdWZN06QTQk+2N2XB9jRDkvbmQmcRtg==",
    },
    "node_modules/body-parser": {
      "version": "1.20.1",
      "resolved": "https://registry.npmjs.org/body-parser/-/body-parser-1.20.1.tgz",
      "integrity": "sha512-9VtW54iMqMkXfEDy5Z/Cb89wBgUjpxXqXqGP8vP0n5y9e3KZJ/v7e0UNqWCXoU49cmF7qEDVZWMFQZiKtA==",
      "dependencies": {
        "bytes": "3.1.2",
        "content-type": "~1.0.4",
        "debug": "2.6.9",
        "depd": "2.0.0",
        "destroy": "1.2.0",

```

```

    "http-errors": "2.0.0",
    "iconv-lite": "0.4.24",
    "on-finished": "2.4.1",
    "qs": "6.11.0",
    "raw-body": "2.5.1",
    "type-is": "~1.6.18",
    "unpipe": "1.0.0"
  },
  "engines": {
    "node": ">= 0.8",
    "npm": "1.2.8000 || >= 1.4.16"
  }
},
"node_modules/brace-expansion": {
  "version": "1.1.11",
  "resolved": "https://registry.npmjs.org/brace-expansion/-/brace-expansion-1.1.11.tgz",
  "integrity": "sha512-iCuPHDFgrHX7H2vEI/5xpz07zSHB00TpugqhmYtVmMO6518mCuRMoOYFfldEB10g187uf
  ozdaHgWKcYFb61qGiA==",
  "dependencies": {
    "balanced-match": "^1.0.0",
    "concat-map": "0.0.1"
  }
},
"node_modules/braces": {
  "version": "3.0.2",
  "resolved": "https://registry.npmjs.org/braces/-/braces-3.0.2.tgz",
  "integrity": "sha512-b8um+L1RzM3WDSzvhm6gIz1yfTbBt6YTlcEKAvsmqCZZFw46z626lVj9j1yEPW33H5H+
  1BQpZMP1k81+78Ha0A==",
  "dependencies": {
    "fill-range": "^7.0.1"
  },
  "engines": {
    "node": ">=8"
  }
},
"node_modules/buffer-from": {
  "version": "1.1.2",
  "resolved": "https://registry.npmjs.org/buffer-from/-/buffer-from-1.1.2.tgz",
  "integrity": "sha512-E+XQCRwSbaaiChtv6k6Dwgc+bx+Bs6vuKJHH15kox/BaKbhiXzqQOwK4c022yElGp2OC
  mjwVhT3HmxgyPGnJfQ=="
},
"node_modules/busboy": {
  "version": "1.6.0",
  "resolved": "https://registry.npmjs.org/busboy/-/busboy-1.6.0.tgz",
  "integrity": "sha512-8SFQbg/0hQ9xy3UNTB0YEnsNBbWfhf7Rtnzpl7TkBiTBRfrQ9Fxcnz7VJsleJpyp6rVL
  vXiuORqjlHi5q+PYuA==",
  "dependencies": {
    "streamsearch": "^1.1.0"
  },
  "engines": {
    "node": ">=10.16.0"
  }
}

```



```

    "dependencies": {
      "anymatch": "~3.1.2",
      "braces": "~3.0.2",
      "glob-parent": "~5.1.2",
      "is-binary-path": "~2.1.0",
      "is-glob": "~4.0.1",
      "normalize-path": "~3.0.0",
      "readdirp": "~3.6.0"
    },
    "engines": {
      "node": ">= 8.10.0"
    },
    "optionalDependencies": {
      "fsevents": "~2.3.2"
    }
  },
  "node_modules/cliui": {
    "version": "7.0.4",
    "resolved": "https://registry.npmjs.org/cliui/-/cliui-7.0.4.tgz",
    "integrity": "sha512-  
Ocre68cOsVMXplYvonl/fzkQOyjLSu/8bhPDFQt0e0/Eb283TKP20Fs2MqoPsr9SwA59  
5rRCA+QMzYc9nBP+JQ==",
    "dependencies": {
      "string-width": "^4.2.0",
      "strip-ansi": "^6.0.0",
      "wrap-ansi": "^7.0.0"
    }
  },
  "node_modules/color-convert": {
    "version": "2.0.1",
    "resolved": "https://registry.npmjs.org/color-convert/-/color-convert-2.0.1.tgz",
    "integrity": "sha512-  
RRECPsj7iu/xb5oKYcsFHSppFNnsj/52OVTRKb4zP5onXwVF3zVmmToNcOfGC+CRDpfK  
/U584fMg38ZHCaElKQ==",
    "dependencies": {
      "color-name": "~1.1.4"
    },
    "engines": {
      "node": ">=7.0.0"
    }
  },
  "node_modules/color-name": {
    "version": "1.1.4",
    "resolved": "https://registry.npmjs.org/color-name/-/color-name-1.1.4.tgz",
    "integrity": "sha512-  
dOy+3AuW3a2wNbZHIuMZpTcgjGuLU/uBL/ubcZF9OXbDo8ff408yVp5Bf0efS8uEoYo5  
q4Fx7dY90gQGxGAsQA==",
    "engines": {

```

```

    "node": ">= 6"
  },
  "node_modules/concat-map": {
    "version": "0.0.1",
    "resolved": "https://registry.npmjs.org/concat-map/-/concat-map-0.0.1.tgz",
    "integrity": "sha512-  
/Srv4dswyQNBfohGpz9o6Yb3Gz3SrUDqBH5rTuhGR7ahtlbYKnVxw2bCFMRljA7EXHa  
XZ8wsHdodFvbkKhKmqg==",
  },
  "node_modules/concat-stream": {
    "version": "1.6.2",
    "resolved": "https://registry.npmjs.org/concat-stream/-  
/concat-stream-1.6.2.tgz",
    "integrity": "sha512-  
27HBghJxjiZtIk3Ycvn/4kbJk/1uZuJffuPEns6LaEvpvG1f0hTea8lilrouyo9mVc2G  
WdcEZ8OLoGmSADlrcw==",
    "engines": [
      "node >= 0.8"
    ],
    "dependencies": {
      "buffer-from": "^1.0.0",
      "inherits": "^2.0.3",
      "readable-stream": "^2.2.2",
      "typedarray": "^0.0.6"
    }
  },
  "node_modules/content-disposition": {
    "version": "0.5.4",
    "resolved": "https://registry.npmjs.org/content-disposition/-  
/content-disposition-0.5.4.tgz",
    "integrity": "sha512-  
FveZTNuGw04cxlAiWbzi6zTAL/lhehaWbTtgluJh4/E95DqMwTmha3KZN1aAWA8cFIhH  
zMZUvLevkw5Rqk+tSQ==",
    "dependencies": {
      "safe-buffer": "5.2.1"
    },
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/content-type": {
    "version": "1.0.5",
    "resolved": "https://registry.npmjs.org/content-type/-  
/content-type-1.0.5.tgz",
    "integrity": "sha512-  
nTjqfcBFEipKdXCv4YDQWCfmcLZKm81ldF0pAopTvyrFGVbcR6P/VAAd5G7N+0tTr8Qq  
iU0tFadD6FK4NtJwOA==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/cookie": {
    "version": "0.5.0",
    "resolved": "https://registry.npmjs.org/cookie/-/cookie-  
0.5.0.tgz",
    "integrity": "sha512-  
YZ3GUyn/o8gfKJlNlX7g7xq4gyO6OSuhGPKaaGssGB2qgDUS0gPgtTvoyZLTt9Ab6dC4

```

```

hfc9dV5arkvc/OCmrw==" ,
  "engines": {
    "node": ">= 0.6"
  }
},
"node_modules/cookie-signature": {
  "version": "1.0.6",
  "resolved": "https://registry.npmjs.org/cookie-signature/-/cookie-signature-1.0.6.tgz",
  "integrity": "sha512-QADzlaHc8icV8I7vbaJXJwod9HWYp8uCqf1xa4OfNu1T7JVxQIrUgOWtHdNDtPiywmFb
iS12VjotIXLrKM3orQ=="
},
"node_modules/core-util-is": {
  "version": "1.0.3",
  "resolved": "https://registry.npmjs.org/core-util-is/-/core-
util-is-1.0.3.tgz",
  "integrity": "sha512-ZQBv1lDcpJ4GDqanjucZ2Hj3wEO5pZDS89BWbkcrvdxksJorwUDDZamX9ldFkp9aw2lm
BDLgkObEA4DWNJ9FYQ=="
},
"node_modules/csv": {
  "version": "6.3.0",
  "resolved": "https://registry.npmjs.org/csv/-/csv-6.3.0.tgz",
  "integrity": "sha512-wXakaMNIz6qe/a15AXQ6JA9urN2lEx08J/3xpxv7Ke3GOr10300Ikbqzrlg1ML0fuEOU
LHhswvSxtN5h/72sHg==" ,
  "dependencies": {
    "csv-generate": "^4.2.6",
    "csv-parse": "^5.3.10",
    "csv-stringify": "^6.4.0",
    "stream-transform": "^3.2.6"
  },
  "engines": {
    "node": ">= 0.1.90"
  }
},
"node_modules/csv-generate": {
  "version": "4.2.6",
  "resolved": "https://registry.npmjs.org/csv-generate/-/csv-
generate-4.2.6.tgz",
  "integrity": "sha512-VtnYqhWLcsUocA346ewFOk+rrqcoT663j11vXzD2uelXq9WguQ3QzDeVD8ISso7hhVtk
DSHcWl9psdemeiEHDA=="
},
"node_modules/csv-parse": {
  "version": "5.3.10",
  "resolved": "https://registry.npmjs.org/csv-parse/-/csv-parse-
5.3.10.tgz",
  "integrity": "sha512-cTXy6iy0gN5Ha/cGILeDgQE+nKiKDU2m0DjSRdJhr86BN3cM7oefBsTk2aH0LQeaYtL7
Z7HvW+jYoadmdhzeDA=="
},
"node_modules/csv-stringify": {
  "version": "6.4.0",
  "resolved": "https://registry.npmjs.org/csv-stringify/-/csv-
stringify-6.4.0.tgz",
  "integrity": "sha512-HQsw0QXiN5fdlO+R8/JzCZnR3Fqp8E87YVnhHlaPtNGJjt6fffbV0LpOkieIb1x6V1+xt

```

```

878IYq77SpXHWaQKkA=="
  },
  "node_modules/csvtojson": {
    "version": "2.0.10",
    "resolved": "https://registry.npmjs.org/csvtojson/-/csvtojson-
2.0.10.tgz",
    "integrity": "sha512-
1UWFxGKYhraKCW8Qghz6Z0f2l/PqB1W3AO0HKJzGIQ5JRS1R651ekJDiGJbBT4sRNNv5
ddnSGVEnsXP9XRCVpQ==",
    "dependencies": {
      "bluebird": "^3.5.1",
      "lodash": "^4.17.3",
      "strip-bom": "^2.0.0"
    },
    "bin": {
      "csvtojson": "bin/csvtojson"
    },
    "engines": {
      "node": ">=4.0.0"
    }
  },
  "node_modules/debug": {
    "version": "2.6.9",
    "resolved": "https://registry.npmjs.org/debug/-/debug-
2.6.9.tgz",
    "integrity": "sha512-
bC7ElrdJaJnPbAP+1EotYvqZsb3ecl5wi6Bfi6BJTUcNowp6cvspg0jXznRTKDjm/E7A
dgFBVeAPVMNcKGsHMA==",
    "dependencies": {
      "ms": "2.0.0"
    }
  },
  "node_modules/depd": {
    "version": "2.0.0",
    "resolved": "https://registry.npmjs.org/depd/-/depd-
2.0.0.tgz",
    "integrity": "sha512-
g7nH6P6dyDioJogAAGprGpCtVImJhpPk/roCzdb3fIh61/s/nPsfr6onyMwkCAR/OlC3
yBC0lESvUoQEAssIrw==",
    "engines": {
      "node": ">= 0.8"
    }
  },
  "node_modules/destroy": {
    "version": "1.2.0",
    "resolved": "https://registry.npmjs.org/destroy/-/destroy-
1.2.0.tgz",
    "integrity": "sha512-
2sJGJTaXIIaRlw4iJSNoN0hnMY7Gpc/n8D4qSCJw8QqFWXf7cuAgnEHxBpweaVcPevC2
13KpjYCx3NypQQgaJg==",
    "engines": {
      "node": ">= 0.8",
      "npm": "1.2.8000 || >= 1.4.16"
    }
  },
  "node_modules/dezalgo": {
    "version": "1.0.4",
    "resolved": "https://registry.npmjs.org/dezalgo/-/dezalgo-
1.0.4.tgz",

```



```

    "integrity": "sha512-
rXSP0bf+5n0Qonsb+SVVfNfIIsimO4HEtmnIpPHY8Q1UCzKlQrDMfdobr8nJOOsRgWCyM
RqeSBQzmWUMq7zvVig==",
    "dependencies": {
      "asap": "^2.0.0",
      "wrappy": "1"
    }
  },
  "node_modules/ee-first": {
    "version": "1.1.1",
    "resolved": "https://registry.npmjs.org/ee-first/-/ee-first-
1.1.1.tgz",
    "integrity": "sha512-
WMwm9LhRUo+WUaRN+vRuETqG89IgZphVSNkdFgeb6sS/E4OrDIN7t48CAewSHXc6C8le
fD8KKfr5vY6lbrQlow==",
    "node_modules/ejs": {
      "version": "3.1.8",
      "resolved": "https://registry.npmjs.org/ejs/-/ejs-3.1.8.tgz",
      "integrity": "sha512-
/sXZeMlhS0Arkfx2Aw780gJzXSMPnKjtspyZv+f3NiKLLubezAHDU5+9xz6gd3/NhG3t
xQCo6xlglmTS+oTGEQ==",
      "dependencies": {
        "jake": "^10.8.5"
      },
      "bin": {
        "ejs": "bin/cli.js"
      },
      "engines": {
        "node": ">=0.10.0"
      }
    },
    "node_modules/emoji-regex": {
      "version": "8.0.0",
      "resolved": "https://registry.npmjs.org/emoji-regex/-/emoji-
regex-8.0.0.tgz",
      "integrity": "sha512-
MSjYzcWNOA0ewAHpz0MxpYFvwg6yjjy1NG3xteoqz644VCo/RPgnr1/GGt+ic3iJTzQ8E
u3TdM14SawnVUmGE6A==",
      "node_modules/encodeurl": {
        "version": "1.0.2",
        "resolved": "https://registry.npmjs.org/encodeurl/-/encodeurl-
1.0.2.tgz",
        "integrity": "sha512-
TPJXq8JqFaVYm2CWmPvnP2Iyo4ZSM7/QKcSmuMLDObfpH5fi7RUGmd/rTDf+rut/said
iQEeVTNgAmJEdAOx0w==",
        "engines": {
          "node": ">= 0.8"
        }
      },
      "node_modules/escalade": {
        "version": "3.1.1",
        "resolved": "https://registry.npmjs.org/escalade/-/escalade-
3.1.1.tgz",
        "integrity": "sha512-
k0er2gUkLf800zKJiAhmkTnJlTvINGv7ygDNPbeIsX/TJjGJZHuh9B2UxbsaEkmlEo9M
fhrSzmhIlhRlI2GXnw==",
        "engines": {

```

```

    "node": ">=6"
  },
  "node_modules/escape-html": {
    "version": "1.0.3",
    "resolved": "https://registry.npmjs.org/escape-html/-/escape-html-1.0.3.tgz",
    "integrity": "sha512-SRwYUts4Yb343T1vLWaStw931sJIxk9YI46Y2n72+ZCvF7N4Ud9HJ8NnO6kGNBpV4PH9+LW/vGK69l3Q==",
  },
  "node_modules/etag": {
    "version": "1.8.1",
    "resolved": "https://registry.npmjs.org/etag/-/etag-1.8.1.tgz",
    "integrity": "sha512-aIL5Fx7mawVa300al2BnEE4iNvolqETxLrPI/o05L7z6go7fCw1J6EQmbK4FmJ2AS7kgVF/KEZWufBfdClMcPg==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/express": {
    "version": "4.18.2",
    "resolved": "https://registry.npmjs.org/express/-/express-4.18.2.tgz",
    "integrity": "sha512-5/PsL6iGPdfQ/lKMlUuielYgv3BUoJfz1aUwU9vHZ+J7gyvwdQXFEBIEIaxeGf0GicreATNyBExtalisDbuMqQ==",
    "dependencies": {
      "accepts": "~1.3.8",
      "array-flatten": "1.1.1",
      "body-parser": "1.20.1",
      "content-disposition": "0.5.4",
      "content-type": "~1.0.4",
      "cookie": "0.5.0",
      "cookie-signature": "1.0.6",
      "debug": "2.6.9",
      "depd": "2.0.0",
      "encodeurl": "~1.0.2",
      "escape-html": "~1.0.3",
      "etag": "~1.8.1",
      "finalhandler": "1.2.0",
      "fresh": "0.5.2",
      "http-errors": "2.0.0",
      "merge-descriptors": "1.0.1",
      "methods": "~1.1.2",
      "on-finished": "2.4.1",
      "parseurl": "~1.3.3",
      "path-to-regexp": "0.1.7",
      "proxy-addr": "~2.0.7",
      "qs": "6.11.0",
      "range-parser": "~1.2.1",
      "safe-buffer": "5.2.1",
      "send": "0.18.0",
      "serve-static": "1.15.0",
      "setprototypeof": "1.2.0",
      "statuses": "2.0.1",
      "type-is": "~1.6.18",
    }
  }
}

```

```

    "utils-merge": "1.0.1",
    "vary": "~1.1.2"
  },
  "engines": {
    "node": ">= 0.10.0"
  }
},
"node_modules/filelist": {
  "version": "1.0.4",
  "resolved": "https://registry.npmjs.org/filelist/-/filelist-1.0.4.tgz",
  "integrity": "sha512-wlcEuf3S+DrLCQL7ET6kz+gmlJdbq9J7yXCSjK/OZCPA+qEN1WyF4ZAf0YYJa4/shHJra2t/d/r8SV4Ji+x+8Q==",
  "dependencies": {
    "minimatch": "^5.0.1"
  }
},
"node_modules/filelist/node_modules/brace-expansion": {
  "version": "2.0.1",
  "resolved": "https://registry.npmjs.org/brace-expansion/-/brace-expansion-2.0.1.tgz",
  "integrity": "sha512-XnAIVQ8eM+kC6aULx6wuQiwVsnzsi9d3WxzV3FpWTGA19F621kwdbAcFKXgKUHZWsy+mY6iLlsHTxWEFCytDA==",
  "dependencies": {
    "balanced-match": "^1.0.0"
  }
},
"node_modules/filelist/node_modules/minimatch": {
  "version": "5.1.6",
  "resolved": "https://registry.npmjs.org/minimatch/-/minimatch-5.1.6.tgz",
  "integrity": "sha512-lKwV/1brpG6mBUFHtb7NUmtABCb2WZZmm2wNiOA5hAb8VdCS4B3dtMWyvcoViccwAW/C OERjXLt0zPlzXUN26g==",
  "dependencies": {
    "brace-expansion": "^2.0.1"
  },
  "engines": {
    "node": ">=10"
  }
},
"node_modules/fill-range": {
  "version": "7.0.1",
  "resolved": "https://registry.npmjs.org/fill-range/-/fill-range-7.0.1.tgz",
  "integrity": "sha512-qOo9F+dMUMC2Lcb4BbVvnKJxTPjCm+RRpe4gDuGrzkL7mEVl/djYSu2OdQ2Pa302N4oqkSg9ir6jaLWJ2USVpQ==",
  "dependencies": {
    "to-regex-range": "^5.0.1"
  },
  "engines": {
    "node": ">=8"
  }
},
"node_modules/finalhandler": {
  "version": "1.2.0",

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    "resolved": "https://registry.npmjs.org/finalhandler/-
/finalhandler-1.2.0.tgz",
    "integrity": "sha512-
5uXcUVftlQMFnWC9qu/svkWv3GTd2PfUhK/3PLkYNAe7FbqJMt3515HaxE6eRL74Gdsr
iiwujiawdaB1BpEISg==",
    "dependencies": {
      "debug": "2.6.9",
      "encodeurl": "~1.0.2",
      "escape-html": "~1.0.3",
      "on-finished": "2.4.1",
      "parseurl": "~1.3.3",
      "statuses": "2.0.1",
      "unpipe": "~1.0.0"
    },
    "engines": {
      "node": ">= 0.8"
    }
  },
  "node_modules/follow-redirects": {
    "version": "1.15.2",
    "resolved": "https://registry.npmjs.org/follow-redirects/-
/follow-redirects-1.15.2.tgz",
    "integrity": "sha512-
VQLG33o04KaQ8uYi2tVNbdrWp1QWxNNea+nmIB4EVM28v0hmp17z7aG1+wAkNzVq4KeX
Tq3221ye5qTJP91JwA==",
    "funding": [
      {
        "type": "individual",
        "url": "https://github.com/sponsors/RubenVerborgh"
      }
    ],
    "engines": {
      "node": ">=4.0"
    },
    "peerDependenciesMeta": {
      "debug": {
        "optional": true
      }
    }
  },
  "node_modules/formidable": {
    "version": "2.1.1",
    "resolved": "https://registry.npmjs.org/formidable/-
/formidable-2.1.1.tgz",
    "integrity": "sha512-
0EcS9wCFEzLvfiKs7omJ+SiYJAiD+TzK4Pcw1U1UoGnhUxDcMKjt0P7x8wEb0u6OHu8N
b98WG3nxtlF5C7bvUQ==",
    "dependencies": {
      "dezalgo": "^1.0.4",
      "hexoid": "^1.0.0",
      "once": "^1.4.0",
      "qs": "^6.11.0"
    },
    "funding": {
      "url": "https://ko-fi.com/tunnckoCore/commissions"
    }
  },
  "node_modules/forwarded": {
    "version": "0.2.0",

```

```

    "resolved": "https://registry.npmjs.org/forwarded/-/forwarded-
0.2.0.tgz",
    "integrity": "sha512-
buRG0fpBtRHSTCOASe6hD258tEubFoRLb4ZNA6NxMVHNw2gOcwHo9wyablzMzOA5z9xA
9L1KNjk/Nt6MT9aYow==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/fresh": {
    "version": "0.5.2",
    "resolved": "https://registry.npmjs.org/fresh/-/fresh-
0.5.2.tgz",
    "integrity": "sha512-
zJ2mQYM18rEFOudeV4GShTGIQ7RbzA7ozbU9I/XBpm7kqgMywgmylMwXHxZJmkVoYkna
9d2pVXVXPdYTP9ej8Q==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/fsevents": {
    "version": "2.3.2",
    "resolved": "https://registry.npmjs.org/fsevents/-/fsevents-
2.3.2.tgz",
    "integrity": "sha512-
xiqMQR4xAeHTuB9uWm+fFRcIOgKBMiOBP+eXiyT7jsgVCq1bkVygt00oASowB7EdtpOH
aaPgKt812P9ab+DDKA==",
    "hasInstallScript": true,
    "optional": true,
    "os": [
      "darwin"
    ],
    "engines": {
      "node": "^8.16.0 || ^10.6.0 || >=11.0.0"
    }
  },
  "node_modules/function-bind": {
    "version": "1.1.1",
    "resolved": "https://registry.npmjs.org/function-bind/-
/function-bind-1.1.1.tgz",
    "integrity": "sha512-
yIovAzMX49sF8Yl58fSCWJ5svSLuaibPxXQJFLmBObTuCr0Mf1KiPopGM9NiFjiYBCbf
aa2Fh6breQ6ANVTI0A==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/get-caller-file": {
    "version": "2.0.5",
    "resolved": "https://registry.npmjs.org/get-caller-file/-/get-
caller-file-2.0.5.tgz",
    "integrity": "sha512-
DyFP3BM/3YHTQOCUL/w0OZHR0lpKeGrxotchWCqNEDnltqFwXVfhEBQ94eIo34AfQpo0
rGki4cyIiftY06h2Fg==",
    "engines": {
      "node": "6.* || 8.* || >= 10.*"
    }
  },
  "node_modules/get-intrinsic": {
    "version": "1.2.0",
    "resolved": "https://registry.npmjs.org/get-intrinsic/-/get-
intrinsic-1.2.0.tgz",

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    "integrity": "sha512-
L049y6nFOuom5wGyRc3/gdTLO94dySVKRACj1RmJZBQXlbTMhtNIgkWkUHQ+jYmZvKf1
4EW1EoJnnjbmoHij0Q==",
    "dependencies": {
      "function-bind": "^1.1.1",
      "has": "^1.0.3",
      "has-symbols": "^1.0.3"
    },
    "funding": {
      "url": "https://github.com/sponsors/ljharb"
    }
  },
  "node_modules/glob-parent": {
    "version": "5.1.2",
    "resolved": "https://registry.npmjs.org/glob-parent/-/glob-
parent-5.1.2.tgz",
    "integrity": "sha512-
AOIgSQCepiJYwP3ARnGx+5VnTu2HBYdzbGP45eLwlvr3zB3vZLeyed1sC9hnbcOc9/Sr
MyM5RPQrkGz4aS9Zow==",
    "dependencies": {
      "is-glob": "^4.0.1"
    },
    "engines": {
      "node": ">= 6"
    }
  },
  "node_modules/has": {
    "version": "1.0.3",
    "resolved": "https://registry.npmjs.org/has/-/has-1.0.3.tgz",
    "integrity": "sha512-
f2dv00VU6Oej7RkWJGrehjbzMAjFp5/VKPP5tTpWIV4JHHZK1/BxbFRtf/siA2SWTe09
caDmVtYYzWEIbBS4zw==",
    "dependencies": {
      "function-bind": "^1.1.1"
    },
    "engines": {
      "node": ">= 0.4.0"
    }
  },
  "node_modules/has-flag": {
    "version": "4.0.0",
    "resolved": "https://registry.npmjs.org/has-flag/-/has-flag-
4.0.0.tgz",
    "integrity": "sha512-
EykJT/Q1KjTWctppgIAgfSO0tKVuZUjhgMr17kqTumMl6Afv3EISleU7qZUzoXDFTAHT
DC4NOoG/ZxU3EvlMPQ==",
    "engines": {
      "node": ">=8"
    }
  },
  "node_modules/has-symbols": {
    "version": "1.0.3",
    "resolved": "https://registry.npmjs.org/has-symbols/-/has-
symbols-1.0.3.tgz",
    "integrity": "sha512-
l3LCuF6MgDNwTDKkdYGEihYjt5pRPbEg46rtlmnSP1UbgbM8LOIrKJbYYFBSbnPaJexM
KtiPO8hmeRjRz2Td+A==",
    "engines": {
      "node": ">= 0.4"
    }
  }

```

```

    },
    "funding": {
      "url": "https://github.com/sponsors/ljharb"
    }
  },
  "node_modules/hexoid": {
    "version": "1.0.0",
    "resolved": "https://registry.npmjs.org/hexoid/-/hexoid-1.0.0.tgz",
    "integrity": "sha512-QFLV0taWQOZtvIRIAdBChesmogZrtuXvVWsFHZTk2SU+anspqZ2vMnoLg7IE1+Uk16N19APic1BuF8bC8c2m5g==",
    "engines": {
      "node": ">=8"
    }
  },
  "node_modules/http-errors": {
    "version": "2.0.0",
    "resolved": "https://registry.npmjs.org/http-errors/-/http-errors-2.0.0.tgz",
    "integrity": "sha512-FtwrG/euBzaEjYeRqOgly7G0qviiXoJWnvEH2Z1plBdXgbyjv34pHTSb9zoeHMyDy33+DWy5Wt9Wo+TURtOYSQ==",
    "dependencies": {
      "depd": "2.0.0",
      "inherits": "2.0.4",
      "setprototypeof": "1.2.0",
      "statuses": "2.0.1",
      "toidentifier": "1.0.1"
    },
    "engines": {
      "node": ">= 0.8"
    }
  },
  "node_modules/iconv-lite": {
    "version": "0.4.24",
    "resolved": "https://registry.npmjs.org/iconv-lite/-/iconv-lite-0.4.24.tgz",
    "integrity": "sha512-v3MXN/ZACvnywkTUEZomIAActle7RXNeedOR31ww17VlYoXO4Qi9arvSenNQWne1TcRwhCLlHwLI2lbEqdpj8/rA==",
    "dependencies": {
      "safer-buffer": ">= 2.1.2 < 3"
    },
    "engines": {
      "node": ">=0.10.0"
    }
  },
  "node_modules/ignore-by-default": {
    "version": "1.0.1",
    "resolved": "https://registry.npmjs.org/ignore-by-default/-/ignore-by-default-1.0.1.tgz",
    "integrity": "sha512-Ius2VYcGNk7T90CppJqcIkS5ooHUYyIQK+ClZfMfMNFEEF9VSE73Fq+906u/CWu92x4gzZMWOWfFYckPObzdBa==",
    "dependencies": {
      "inherits": {
        "version": "2.0.4",
        "resolved": "https://registry.npmjs.org/inherits/-/inherits-

```

```

2.0.4.tgz",
  "integrity": "sha512-
k/vGaX4/Yla3WzyMCvTQOXYeIHvqOKtnqBduzTHpzpQZzAskKMhZ2K+EnBiSM9zGSoIF
eMpXKxa4dYeZIQqewQ=="
},
"node_modules/ipaddr.js": {
  "version": "1.9.1",
  "resolved": "https://registry.npmjs.org/ipaddr.js/-/ipaddr.js-
1.9.1.tgz",
  "integrity": "sha512-
0KI/607xoxSToH7GjN1FfSbLoU0+btTicjsQSWQlh/hZykn8KpmMf7uYwPW3R+akZ6R/
w18ZlXSHBYXiYUPO3g==",
  "engines": {
    "node": ">= 0.10"
  }
},
"node_modules/is-binary-path": {
  "version": "2.1.0",
  "resolved": "https://registry.npmjs.org/is-binary-path/-/is-
binary-path-2.1.0.tgz",
  "integrity": "sha512-
ZMERYes6pDydyuGidse7OsHxtbI7WVeUEozgR/g7rd0xUimYNlvZRE/K2MgZTjWy725I
felLeVcEM97mmTRGXw==",
  "dependencies": {
    "binary-extensions": "^2.0.0"
  },
  "engines": {
    "node": ">=8"
  }
},
"node_modules/is-extglob": {
  "version": "2.1.1",
  "resolved": "https://registry.npmjs.org/is-extglob/-/is-
extglob-2.1.1.tgz",
  "integrity": "sha512-
SbKbANKn603Vi4jEZv49LeVJMn4yGwsbzZworEoyEiutsN3nJYdbO36zfhGJ6QEDpOZI
FkDtnq5JRxmvl3jsoQ==",
  "engines": {
    "node": ">=0.10.0"
  }
},
"node_modules/is-fullwidth-code-point": {
  "version": "3.0.0",
  "resolved": "https://registry.npmjs.org/is-fullwidth-code-
point/-/is-fullwidth-code-point-3.0.0.tgz",
  "integrity": "sha512-
zymm5+u+sCsSWyD9qNaejV3DFvhCKclKdizYaJUuHA83RLjb7nSuGnddCHGv0hk+KY7B
MAIsWeK4Ueg6EV6XQg==",
  "engines": {
    "node": ">=8"
  }
},
"node_modules/is-glob": {
  "version": "4.0.3",
  "resolved": "https://registry.npmjs.org/is-glob/-/is-glob-
4.0.3.tgz",
  "integrity": "sha512-
xelSayHH36ZgE7ZWWhli7pW34hNbNl8Ojv5KVmkJD4hBdD3th8Tfk9vYasLM+mXWOZhFk
gZfxhLSnrwRr4elSSg==",

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```

JQLYqGfaJP4dVV0zIxH6RmH0dnJ32Qch3yDxDtWQy8KsOv73SthVRo38ANXckJxl/WUf
GYvvtOlVwPURMTWqlA=="
  },
  "node_modules/json2csv": {
    "version": "6.0.0-alpha.2",
    "resolved": "https://registry.npmjs.org/json2csv/-/json2csv-
6.0.0-alpha.2.tgz",
    "integrity": "sha512-
nJ3oP6QxN8z69IT1HmrJdfVxhU1kLTBVgMfRnNZc37YEEY+jZ4nU27rBGxT4vaqM/KUCa
vLRhntmTuBFqZLBUCa==",
    "dependencies": {
      "@streamparser/json": "^0.0.6",
      "commander": "^6.2.0",
      "lodash.get": "^4.4.2"
    },
    "bin": {
      "json2csv": "bin/json2csv.js"
    },
    "engines": {
      "node": ">= 12",
      "npm": ">= 6.13.0"
    }
  },
  "node_modules/localtunnel": {
    "version": "2.0.2",
    "resolved": "https://registry.npmjs.org/localtunnel/-
/localtunnel-2.0.2.tgz",
    "integrity": "sha512-
n418Cn5ynvJd7m/Nld9WVJISLJF/ellZnfsLnX8WBWGzxv/ntNcFkJ1o6se5quUhCplf
LGBNL5tYHiq5WF3Nug==",
    "dependencies": {
      "axios": "0.21.4",
      "debug": "4.3.2",
      "openurl": "1.1.1",
      "yargs": "17.1.1"
    },
    "bin": {
      "lt": "bin/lt.js"
    },
    "engines": {
      "node": ">=8.3.0"
    }
  },
  "node_modules/localtunnel/node_modules/debug": {
    "version": "4.3.2",
    "resolved": "https://registry.npmjs.org/debug/-/debug-
4.3.2.tgz",
    "integrity": "sha512-
mOp8wKcvj7XxC78zLgw/ZA+6TSgkoE2C/ienthhRD298T7UNwAg9diBpLRxC0mOezLl4
B0xV7M0cCO6P/O0Xhw==",
    "dependencies": {
      "ms": "2.1.2"
    },
    "engines": {
      "node": ">=6.0"
    },
    "peerDependenciesMeta": {
      "supports-color": {
        "optional": true
      }
    }
  }
}

```

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    }
  },
  "node_modules/localtunnel/node_modules/ms": {
    "version": "2.1.2",
    "resolved": "https://registry.npmjs.org/ms/-/ms-2.1.2.tgz",
    "integrity": "sha512-sGkPx+VjMtmA6MX27oA4FBFELFCZZ4S4XqeGOXCv68tT+jb3vk/RyaKWP0PTKyWtmLSM
0b+adUTEvbs1PEaH2w=="
  },
  "node_modules/lodash": {
    "version": "4.17.21",
    "resolved": "https://registry.npmjs.org/lodash/-/lodash-
4.17.21.tgz",
    "integrity": "sha512-v2kDEe57lecTulaDIuNTPy3Ry4gLGJ6ZlO3vE1krgXZNrsQ+LFTGHVxVjcXPs17LhbZV
GedAJv8XZ1tvj5FvSg=="
  },
  "node_modules/lodash.get": {
    "version": "4.4.2",
    "resolved": "https://registry.npmjs.org/lodash.get/-
/lodash.get-4.4.2.tgz",
    "integrity": "sha512-z+Uw/vLuy6gQe8cfaFWD7p0wVv8fJl3mbzXh33RS+0oW2wvUqiRXiQ69gLWSLpgB5/6s
U+r6BlQR0MBILadqTQ=="
  },
  "node_modules/media-typer": {
    "version": "0.3.0",
    "resolved": "https://registry.npmjs.org/media-typer/-/media-
typer-0.3.0.tgz",
    "integrity": "sha512-dq+qelQ9akHpcOl/gUVRTxVIOkAJlW3QA4b4RsVjS8oVoFjDGTc679wJYmUmknUF5Hw
MLOgb5O+a3KxfWapPQ==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/merge-descriptors": {
    "version": "1.0.1",
    "resolved": "https://registry.npmjs.org/merge-descriptors/-
/merge-descriptors-1.0.1.tgz",
    "integrity": "sha512-cCi6g3/ZrliqQi6ySbseMlXvoaa98N0w31jzUYrXPX2xqObmFGHJ0tQ5u74H3mVh7wLo
uTseZyYIq39g8cNplw=="
  },
  "node_modules/methods": {
    "version": "1.1.2",
    "resolved": "https://registry.npmjs.org/methods/-/methods-
1.1.2.tgz",
    "integrity": "sha512-cCi6g3/ZrliqQi6ySbseMlXvoaa98N0w31jzUYrXPX2xqObmFGHJ0tQ5u74H3mVh7wLo
iclAHeNqNm68zFtnZ0e+1L2yUIdivzNoauKU4WBA3VvH/vPFieF7qfRlWUZU+DA9P9bPX
IS90ulxoUoCH23sV2w==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/mime": {
    "version": "1.6.0",
    "resolved": "https://registry.npmjs.org/mime/-/mime-

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```

1.6.0.tgz",
  "integrity": "sha512-
x0Vn8spI+wuJl06S7gnbaQg8Pxh4NNHb7KSINmEWKiPE4RKOpIvijn+NkmYmmRgP68mc
70j2EbeTFRsrswaQeg==",
  "bin": {
    "mime": "cli.js"
  },
  "engines": {
    "node": ">=4"
  }
},
"node_modules/mime-db": {
  "version": "1.52.0",
  "resolved": "https://registry.npmjs.org/mime-db/-/mime-db-
1.52.0.tgz",
  "integrity": "sha512-
sPU4uV7dYlvtWJxwwwHD0PuihVNiE7TyAbQ5SWxDCB9mUYvOgroQOwYQQOKPJ8CIbE+1
ETVlOoKlUC2nU3gYvg==",
  "engines": {
    "node": ">= 0.6"
  }
},
"node_modules/mime-types": {
  "version": "2.1.35",
  "resolved": "https://registry.npmjs.org/mime-types/-/mime-
types-2.1.35.tgz",
  "integrity": "sha512-
ZDY+bPm5zTTF+YpCrAU9nK0UgICYPT0QtTlNZWFv4s++TNkcgVaT0g6+4R2uI4MjQjzy
SHB1zXuWL50hzaeXiw==",
  "dependencies": {
    "mime-db": "1.52.0"
  },
  "engines": {
    "node": ">= 0.6"
  }
},
"node_modules/minimatch": {
  "version": "3.1.2",
  "resolved": "https://registry.npmjs.org/minimatch/-/minimatch-
3.1.2.tgz",
  "integrity": "sha512-
J7p63hRiAjwlnDEwwlW7i37+ByIrOWO5XQQAzZ3VOcL0PNybwpmV/N05zFAzwQ9USyE
cX6t3UO+K5aqBQOIHW==",
  "dependencies": {
    "brace-expansion": "^1.1.7"
  },
  "engines": {
    "node": "*"
  }
},
"node_modules/minimist": {
  "version": "1.2.8",
  "resolved": "https://registry.npmjs.org/minimist/-/minimist-
1.2.8.tgz",
  "integrity": "sha512-
2yyAR8qBkN3YuheJanUpWC5U3bb5osDywnB8RzDVlDwDHbocAJveqqj1u8+SVD7jkWT4
yvsHCpWqqWqAxb0zCA==",
  "funding": {
    "url": "https://github.com/sponsors/ljharb"
  }
}

```

```

    }
  },
  "node_modules/mkdirp": {
    "version": "0.5.6",
    "resolved": "https://registry.npmjs.org/mkdirp/-/mkdirp-0.5.6.tgz",
    "integrity": "sha512-+NcPbdkrB5D2e38FTxFZvZD4Y6P4gBTcB34Bj2BS3o18y7juzk1vuyE8sLQnXW5sXU614j3/2u/1eZ4jYg==",
    "dependencies": {
      "minimist": "^1.2.6"
    },
    "bin": {
      "mkdirp": "bin/cmd.js"
    }
  },
  "node_modules/ms": {
    "version": "2.0.0",
    "resolved": "https://registry.npmjs.org/ms/-/ms-2.0.0.tgz",
    "integrity": "sha512-T39v4B1B4B0B6xJGuaQIE6zhUd8oRtXGqCpODhUmiEnB8W8W7I9N/2oc2U4jIhO6+5WD8ZaZVKYwNtDpb==",
    "dependencies": {}
  },
  "node_modules/multer": {
    "version": "1.4.5-lts.1",
    "resolved": "https://registry.npmjs.org/multer/-/multer-1.4.5-lts.1.tgz",
    "integrity": "sha512-3k0T4u0733N4896N0e09OJqVWV32gWt3N5BbXlQv8yBUK9KtHY9B4VS6wLmLVDBG899k8dgh3ZlUyLQ==",
    "dependencies": {
      "append-field": "^1.0.0",
      "busboy": "^1.0.0",
      "concat-stream": "^1.5.2",
      "mkdirp": "^0.5.4",
      "object-assign": "^4.1.1",
      "type-is": "^1.6.4",
      "xtend": "^4.0.0"
    },
    "engines": {
      "node": ">= 6.0.0"
    }
  },
  "node_modules/negotiator": {
    "version": "0.6.3",
    "resolved": "https://registry.npmjs.org/negotiator/-/negotiator-0.6.3.tgz",
    "integrity": "sha512-+EUsqGPLsM+j/zdChZjsnX51g4XrHFOIXwfnCVPGlQk/k5giakcKsuxCOBRu6DSm9opw/O6slWbJdghQM4bBg==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/nodemon": {
    "version": "2.0.22",
    "resolved": "https://registry.npmjs.org/nodemon/-/nodemon-2.0.22.tgz",
    "integrity": "sha512-5U1s377+0N949+L4JNrgmW01fI/6mWzcSLdL2KXVniN6p4Xk92eM6J1dmiJOZIzZv3eY6pOZwVQZvVg==",

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```

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n5BUaoutadnsX3AAVQ==",
  "dependencies": {
    "chokidar": "^3.5.2",
    "debug": "^3.2.7",
    "ignore-by-default": "^1.0.1",
    "minimatch": "^3.1.2",
    "pstree.remy": "^1.1.8",
    "semver": "^5.7.1",
    "simple-update-notifier": "^1.0.7",
    "supports-color": "^5.5.0",
    "touch": "^3.1.0",
    "undefsafe": "^2.0.5"
  },
  "bin": {
    "nodemon": "bin/nodemon.js"
  },
  "engines": {
    "node": ">=8.10.0"
  },
  "funding": {
    "type": "opencollective",
    "url": "https://opencollective.com/nodemon"
  }
},
"node_modules/nodemon/node_modules/debug": {
  "version": "3.2.7",
  "resolved": "https://registry.npmjs.org/debug/-/debug-
3.2.7.tgz",
  "integrity": "sha512-CFfjzYYAi4ThfiQvizrFQevTTXHTnCqWfe7x1AhgEscTz6ZbLbfoLRLPugTQyBth6f8ZE
RVUSyWHFD/7Wu4t1XQ==",
  "dependencies": {
    "ms": "^2.1.1"
  }
},
"node_modules/nodemon/node_modules/has-flag": {
  "version": "3.0.0",
  "resolved": "https://registry.npmjs.org/has-flag/-/has-flag-
3.0.0.tgz",
  "integrity": "sha512-cKbOhR93nuVP/3UgZ/0Bt014sgKzZehNgA7Z1dEK7XLHgrHofQndKOoIvECPKHCHBhiYk
sKJf1+ceQBr4SMkvQnBDNDtf4TXpVhVGateu0t918bl30FnBE2m4vNLX+VWe/dpj1b+H
ugGYzW7uQXH98HPEYw==",
  "engines": {
    "node": ">=4"
  }
},
"node_modules/nodemon/node_modules/ms": {
  "version": "2.1.3",
  "resolved": "https://registry.npmjs.org/ms/-/ms-2.1.3.tgz",
  "integrity": "sha512-6FlzubTLZG3J2a/NVCAleEhJzq5oxghHyaCU9yYXvcLsvoVaHJq/s5xXI6/XXP6tz7R9x
AOtHnSO/tXtF3WRT1A=="
},
"node_modules/nodemon/node_modules/supports-color": {
  "version": "5.5.0",
  "resolved": "https://registry.npmjs.org/supports-color/-
/supports-color-5.5.0.tgz",
  "integrity": "sha512-QjVjwdXIt60Ia1QSSCXeWfzgKdp7BzIvBkiB4V0M1Ga4zWtpvmehdZnS2rEi3qvpL3YNQ

```

```

QjVjwdXIt408MIiAqCX4oUKsgU2EqAGzs2Ppkm4aQYbjm+ZEWecW4SfFNTr4uMNZma0e
y4f5lgLrkB0aX0QMow==",
  "dependencies": {
    "has-flag": "^3.0.0"
  },
  "engines": {
    "node": ">=4"
  }
},
"node_modules/nopt": {
  "version": "1.0.10",
  "resolved": "https://registry.npmjs.org/nopt/-/nopt-
1.0.10.tgz",
  "integrity": "sha512-NWmpvLSqUrgrAC9HCuxEVB+PSloHpqVu+FqcO4eeF2h5qYRhA7ev6KvelyQAKtegUbC6
RypJnlEOhd8vloNKYg==",
  "dependencies": {
    "abbrev": "1"
  },
  "bin": {
    "nopt": "bin/nopt.js"
  },
  "engines": {
    "node": "*"
  }
},
"node_modules/normalize-path": {
  "version": "3.0.0",
  "resolved": "https://registry.npmjs.org/normalize-path/-
/normalize-path-3.0.0.tgz",
  "integrity": "sha512-6eZs5Ls3WtCisHWp9S2GUY8dqkpGi4BVSz3GaQieE6ezub0512ESztXUwUB6C6IKbQkY2
Pnb/mD4WYojCRwcwLA==",
  "engines": {
    "node": ">=0.10.0"
  }
},
"node_modules/object-assign": {
  "version": "4.1.1",
  "resolved": "https://registry.npmjs.org/object-assign/-
/object-assign-4.1.1.tgz",
  "integrity": "sha512-rJgTQnkUnHlsFw8yT6VSU3zD3sWmu6sZhIseY8VX+GRu3P6F7Fu+JNDoXfklElbLJSnc
3FUQHVe4cU5hj+BcUg==",
  "engines": {
    "node": ">=0.10.0"
  }
},
"node_modules/object-inspect": {
  "version": "1.12.3",
  "resolved": "https://registry.npmjs.org/object-inspect/-
/object-inspect-1.12.3.tgz",
  "integrity": "sha512-geUvdk7c+eizMNuDKRpWlwJwgfOiOeHbxBR/hLXK1aT6zmVS00jsQcs7fj6MGw89jC/c
jGfLcNOrtMYtGqm81g==",
  "funding": {
    "url": "https://github.com/sponsors/ljharb"
  }
},

```

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    "node_modules/on-finished": {
      "version": "2.4.1",
      "resolved": "https://registry.npmjs.org/on-finished/-/on-finished-2.4.1.tgz",
      "integrity": "sha512-oVlzkkg3ENAhCk2zdv7IJwd/QUd4z2RxRwpkcGY8psCVcCYZNq4wYnVWALHM+brtuJjeP
WiYF/CImuDr8Ch5+kg==",
      "dependencies": {
        "ee-first": "1.1.1"
      },
      "engines": {
        "node": ">= 0.8"
      }
    },
    "node_modules/once": {
      "version": "1.4.0",
      "resolved": "https://registry.npmjs.org/once/-/once-1.4.0.tgz",
      "integrity": "sha512-1NaJgI+2Q5URQBkccEKHTQOPaXdUxnZZElQTZY0MFUAuaEge1E+Nyvgdz/aIyNi6Z9Mz
O5dvlH8n58/GELp3+w==",
      "dependencies": {
        "wrappy": "1"
      }
    },
    "node_modules/openurl": {
      "version": "1.1.1",
      "resolved": "https://registry.npmjs.org/openurl/-/openurl-1.1.1.tgz",
      "integrity": "sha512-d/gTkb1l1GKz5k3XE3XFV/PxQ1k45zDqGP2OA7YhgSaLoqm6qRvARAZOFer1fcXritW
1GBRCu/UgeS4HAnXAA==",
    },
    "node_modules/papaparse": {
      "version": "5.4.1",
      "resolved": "https://registry.npmjs.org/papaparse/-/papaparse-5.4.1.tgz",
      "integrity": "sha512-HipMsgJkZu8br23pW15uvo6sib6wne/4woLZPlFf3rpDyMe9ywEXUuD7+6K9PRkJ1VT
51j/sCOYDKGGS3ZJrw==",
    },
    "node_modules/parseurl": {
      "version": "1.3.3",
      "resolved": "https://registry.npmjs.org/parseurl/-/parseurl-1.3.3.tgz",
      "integrity": "sha512-CiyeOxFt/JZyN5m0z9PfXw4SCBJ6Syzg1Dpl0wqjlhDEGGBP1GnsUVEL0p63hoG1fcj3
fHynXi9NYO4nWOL+qQ==",
      "engines": {
        "node": ">= 0.8"
      }
    },
    "node_modules/path-to-regexp": {
      "version": "0.1.7",
      "resolved": "https://registry.npmjs.org/path-to-regexp/-/path-to-regexp-0.1.7.tgz",
      "integrity": "sha512-5DFkuaqlvluYQKxy8omFBeJPQcdoE07Kv2sferDCrAq1ohOU+MSDswDIbnx3YAM60qIO
nYa53wBhXW0EbMonrQ=="

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    },
    "node_modules/picomatch": {
      "version": "2.3.1",
      "resolved": "https://registry.npmjs.org/picomatch/-/picomatch-2.3.1.tgz",
      "integrity": "sha512-JU3teHTNjmE2VCGFzuY8EXzCDVWEqB2a8fsIvwaStHhAWJEEvd1o1QD80CU6+ZdEXXSLbSsuLwJjkCBWqRQUVA==",
      "engines": {
        "node": ">=8.6"
      },
      "funding": {
        "url": "https://github.com/sponsors/jonschlinkert"
      }
    },
    "node_modules/process-nextick-args": {
      "version": "2.0.1",
      "resolved": "https://registry.npmjs.org/process-nextick-args/-/process-nextick-args-2.0.1.tgz",
      "integrity": "sha512-3ouUOpQhtgrbOa17J7+uxOTpITYWaGP7/AhoR3+A+/1e9skrzelGi/dXzEYyvbxbubEF6Wn2ypscTKiKJFFnlag==",
    },
    "node_modules/proxy-addr": {
      "version": "2.0.7",
      "resolved": "https://registry.npmjs.org/proxy-addr/-/proxy-addr-2.0.7.tgz",
      "integrity": "sha512-llQsMLSUDUPT44jdrU/O37qlnifitDP+ZwrmmZcoSKyLKvtZxpyV0n2/bD/N4tBAAZ/gJEdZU7KMraoK1+XYAg==",
      "dependencies": {
        "forwarded": "0.2.0",
        "ipaddr.js": "1.9.1"
      },
      "engines": {
        "node": ">= 0.10"
      }
    },
    "node_modules/pstree.remy": {
      "version": "1.1.8",
      "resolved": "https://registry.npmjs.org/pstree.remy/-/pstree.remy-1.1.8.tgz",
      "integrity": "sha512-77DZwxQmxKnu3aR542U+X8FypNzbfJ+C5XQDk3uWjWxn6151aIMGthWYRXtqT1E5oJvg+ljaa2OJi+VfvCOQ8w==",
    },
    "node_modules/python-shell": {
      "version": "5.0.0",
      "resolved": "https://registry.npmjs.org/python-shell/-/python-shell-5.0.0.tgz",
      "integrity": "sha512-RU000jHLhgR1MIQrCtnEqz/HJ1RMZBIN+REnpsURfft2bXqXy69fwJASVziWExfFXsR1bCY0TznnHooNsCo0/w==",
      "engines": {
        "node": ">=0.10"
      }
    },
    "node_modules/qs": {
      "version": "6.11.0",

```

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    "resolved": "https://registry.npmjs.org/qs/-/qs-6.11.0.tgz",
    "integrity": "sha512-MvjoMCJwEarSbUYk5O+nmoSzSutSsTwF85zcHPQ9OrlFoZOYIjaqBAJIqIXjptyD5vTh
xGq52Xu/MaJzRkIk4Q==",
    "dependencies": {
      "side-channel": "^1.0.4"
    },
    "engines": {
      "node": ">=0.6"
    },
    "funding": {
      "url": "https://github.com/sponsors/ljharb"
    }
  },
  "node_modules/range-parser": {
    "version": "1.2.1",
    "resolved": "https://registry.npmjs.org/range-parser/-/range-
parser-1.2.1.tgz",
    "integrity": "sha512-
Hrgsx+orqoygnmhFbKaHE6c296J+HTAQXoxEF6gNupROmmGJRozzfG3ccAveqCBwr/2
yxQ5BVd/GTl5agOwSg==",
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/raw-body": {
    "version": "2.5.1",
    "resolved": "https://registry.npmjs.org/raw-body/-/raw-body-
2.5.1.tgz",
    "integrity": "sha512-
qqJBtEyVgS0ZmPGdCFPWJ3FreoqvG4MVQln/kCgF70lq95IbOp0/BWyMwbdtn4VTvkM8
Y7khCQ2Xgk/tcrCXig==",
    "dependencies": {
      "bytes": "3.1.2",
      "http-errors": "2.0.0",
      "iconv-lite": "0.4.24",
      "unpipe": "1.0.0"
    },
    "engines": {
      "node": ">= 0.8"
    }
  },
  "node_modules/readable-stream": {
    "version": "2.3.8",
    "resolved": "https://registry.npmjs.org/readable-stream/-
/readable-stream-2.3.8.tgz",
    "integrity": "sha512-
8p0AUk4XODgIewSi0l8Epjs+EVnWiK7NoDIEGU0HhE7+ZyY8D1IMY7odu5lRrFXGg71L
15KG8QrPmum45RTtdA==",
    "dependencies": {
      "core-util-is": "~1.0.0",
      "inherits": "~2.0.3",
      "isarray": "~1.0.0",
      "process-nextick-args": "~2.0.0",
      "safe-buffer": "~5.1.1",
      "string_decoder": "~1.1.1",
      "util-deprecate": "~1.0.1"
    }
  },

```

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    "node_modules/readable-stream/node_modules/safe-buffer": {
      "version": "5.1.2",
      "resolved": "https://registry.npmjs.org/safe-buffer/-/safe-buffer-5.1.2.tgz",
      "integrity": "sha512-Gd2UZBJDkXlY7GbJxfsE8/nvKkUEU1G38c1siN6QP6a9PT9MmHB8GnpscSmMJSoF8LOIrt8ud/wPtoajys4G6+g=="
    },
    "node_modules/readdirp": {
      "version": "3.6.0",
      "resolved": "https://registry.npmjs.org/readdirp/-/readdirp-3.6.0.tgz",
      "integrity": "sha512-kOSyM+3YjGVI7Fheio0/42Wd2lm3EaWtuo93KCilv3WQZo+wyL7Eg4xJpKL8HHGm2W7BrO0L8wKD803NNw==",
      "dependencies": {
        "picomatch": "^2.2.1"
      },
      "engines": {
        "node": ">=8.10.0"
      }
    },
    "node_modules/require-directory": {
      "version": "2.1.1",
      "resolved": "https://registry.npmjs.org/require-directory/-/require-directory-2.1.1.tgz",
      "integrity": "sha512-fGxEI7+wsG9xrvdjsrmlL22OMTTiHRwAMroiEeMgq8gzoLC/PQr7RsRDSTLUg/bZAZtF+TVIkHc6/4RIKrui+Q==",
      "engines": {
        "node": ">=0.10.0"
      }
    },
    "node_modules/safe-buffer": {
      "version": "5.2.1",
      "resolved": "https://registry.npmjs.org/safe-buffer/-/safe-buffer-5.2.1.tgz",
      "integrity": "sha512-rGvgrFjPvtbUjNboZZwk7Nc3B4CfjW7Pn3rHW04Gq8S1A9q/1Zu4wvG1wDLvYxyUb6JPV4WgibMBe880==",
      "funding": [
        {
          "type": "github",
          "url": "https://github.com/sponsors/feross"
        },
        {
          "type": "patreon",
          "url": "https://www.patreon.com/feross"
        },
        {
          "type": "consulting",
          "url": "https://feross.org/support"
        }
      ]
    },
    "node_modules/safer-buffer": {
      "version": "2.1.2",
      "resolved": "https://registry.npmjs.org/safer-buffer/-/safer-buffer-2.1.2.tgz",

```

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    "integrity": "sha512-
YZo3K82SD7Riyi0E1EQPoJLz7kpepnSQI9IyPbHHg1XXXevb5dJI7tpyN2ADxGcQbHG7
vcyRHk0cbwqcQriUtg=="
  },
  "node_modules/semver": {
    "version": "5.7.1",
    "resolved": "https://registry.npmjs.org/semver/-/semver-
5.7.1.tgz",
    "integrity": "sha512-
sauaDf/PZdVgrLTNYHRtpXaliRiKcaebiKQ1BJdpQlWH2lCvexQdX55snPFyK7Qzpudq
bCI0qXFFoAsHdyNDGQ=="
    "bin": {
      "semver": "bin/semver"
    }
  },
  "node_modules/send": {
    "version": "0.18.0",
    "resolved": "https://registry.npmjs.org/send/-/send-
0.18.0.tgz",
    "integrity": "sha512-
qqWzuOjSFOuqPjFe4NOsMLafToQQwBSOEps+FwEt3A2V3vKubTquT3vmLTQpFgMXp8A1
FWFuPlqKaJZOtPpVXg==",
    "dependencies": {
      "debug": "2.6.9",
      "depd": "2.0.0",
      "destroy": "1.2.0",
      "encodeurl": "~1.0.2",
      "escape-html": "~1.0.3",
      "etag": "~1.8.1",
      "fresh": "0.5.2",
      "http-errors": "2.0.0",
      "mime": "1.6.0",
      "ms": "2.1.3",
      "on-finished": "2.4.1",
      "range-parser": "~1.2.1",
      "statuses": "2.0.1"
    },
    "engines": {
      "node": ">= 0.8.0"
    }
  },
  "node_modules/send/node_modules/ms": {
    "version": "2.1.3",
    "resolved": "https://registry.npmjs.org/ms/-/ms-2.1.3.tgz",
    "integrity": "sha512-
6FlzubTLZG3J2a/NVCAleEhjq5oxgHyaCU9yYXvcLsvoVaHJq/s5xXI6/XXP6tz7R9x
AOtHnSO/tXtF3WRTlA=="
  },
  "node_modules/serve-static": {
    "version": "1.15.0",
    "resolved": "https://registry.npmjs.org/serve-static/-/serve-
static-1.15.0.tgz",
    "integrity": "sha512-
XGuRDNjXUIjsUL0vl6nSD7cwURuzEgglbOaFuZM9g3kwdXOWVTck0jLzjPzGD+TazWbb
oZYU52/9/XPdUgne9g==",
    "dependencies": {
      "encodeurl": "~1.0.2",
      "escape-html": "~1.0.3",
      "parseurl": "~1.3.3",

```

```

    "send": "0.18.0"
  },
  "engines": {
    "node": ">= 0.8.0"
  }
},
"node_modules/setprototypeof": {
  "version": "1.2.0",
  "resolved": "https://registry.npmjs.org/setprototypeof/-/setprototypeof-1.2.0.tgz",
  "integrity": "sha512-E5LDX7Wrp85Kil5bhZv46j8jOeboKq5JMmYM3gVGdGH8xFpPWxUMsNr1ODCrkoXMEeNi/XZiWuRvY4XNwYmJpw=="
},
"node_modules/side-channel": {
  "version": "1.0.4",
  "resolved": "https://registry.npmjs.org/side-channel/-/side-channel-1.0.4.tgz",
  "integrity": "sha512-q5XPytqFEIKhkGdiMIrY10mvLRvnQh42/+GoBlFW3b2LXLE2xxJpZFdm94we0BaoV3RwJyGqg5wS7epxTv0Zvw==",
  "dependencies": {
    "call-bind": "^1.0.0",
    "get-intrinsic": "^1.0.2",
    "object-inspect": "^1.9.0"
  },
  "funding": {
    "url": "https://github.com/sponsors/ljharb"
  }
},
"node_modules/simple-update-notifier": {
  "version": "1.1.0",
  "resolved": "https://registry.npmjs.org/simple-update-notifier/-/simple-update-notifier-1.1.0.tgz",
  "integrity": "sha512-VpsrsJSUCJEseSbMHkrSrAVSdvVS5I96Qo1QAQ4FxQ9wXFCB+pjj7FB7/us9+GcgfW4ziHtYMc1J0PLczb55mg==",
  "dependencies": {
    "semver": "~7.0.0"
  },
  "engines": {
    "node": ">=8.10.0"
  }
},
"node_modules/simple-update-notifier/node_modules/semver": {
  "version": "7.0.0",
  "resolved": "https://registry.npmjs.org/semver/-/semver-7.0.0.tgz",
  "integrity": "sha512-+GB6zVA9LWh6zovYQLALHwv5rb2PHGlJi3lfiqIHxR0uuwCgefcoJc59v9fv1w8GbStwxuuqqAjI9NMAOOgqlA==",
  "bin": {
    "semver": "bin/semver.js"
  }
},
"node_modules/statuses": {
  "version": "2.0.1",
  "resolved": "https://registry.npmjs.org/statuses/-/statuses-2.0.1.tgz",

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```

    "integrity": "sha512-
RwNA9Z/7PrK06rYLIzFMlaF+l73iwpzsqRIFgbMLbTcLD6cOao82TaWefPXQvB2fOC4A
juYSEndS7N/mTCbkdQ==",
    "engines": {
      "node": ">= 0.8"
    }
  },
  "node_modules/stream-transform": {
    "version": "3.2.6",
    "resolved": "https://registry.npmjs.org/stream-transform/-
/stream-transform-3.2.6.tgz",
    "integrity": "sha512-
/pyOvaCQFqYTmrFhmMbnAEVo3SsTx1H39eUVPotYeAgbEUc+rDo7GoP8LbHJgU83mKtz
Je/7Nq/ipaAnUOHgJQ==",
  },
  "node_modules/streamsearch": {
    "version": "1.1.0",
    "resolved": "https://registry.npmjs.org/streamsearch/-
/streamsearch-1.1.0.tgz",
    "integrity": "sha512-
Mcc5wHehp9aXz1ax6bZUyY5afg9u2rv5cqQI3mRrYkGC8rW2hM02jWuwjtL++LS5qinS
yhj2QfLyNsuc+VsExg==",
    "engines": {
      "node": ">=10.0.0"
    }
  },
  "node_modules/string_decoder": {
    "version": "1.1.1",
    "resolved": "https://registry.npmjs.org/string_decoder/-
/string_decoder-1.1.1.tgz",
    "integrity": "sha512-
n/ShnvDi6FHbbVfviro+WojiFzv+s8MPMHBczVePfUpDJLwoLT0ht1l4YwBCbi8pJAve
EEednkHyPyTP/mzRfwg==",
    "dependencies": {
      "safe-buffer": "~5.1.0"
    }
  },
  "node_modules/string_decoder/node_modules/safe-buffer": {
    "version": "5.1.2",
    "resolved": "https://registry.npmjs.org/safe-buffer/-/safe-
buffer-5.1.2.tgz",
    "integrity": "sha512-
Gd2UZBJDkXl1Y7GbJxfsE8/nvKkUEU1G38c1siN6QP6a9PT9MmHB8GnpScSmMJSof8LOI
rt8ud/wPtojys4G6+g==",
  },
  "node_modules/string-width": {
    "version": "4.2.3",
    "resolved": "https://registry.npmjs.org/string-width/-/string-
width-4.2.3.tgz",
    "integrity": "sha512-
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xKTWYwUwvSTriiZz/g==",
    "dependencies": {
      "emoji-regex": "^8.0.0",
      "is-fullwidth-code-point": "^3.0.0",
      "strip-ansi": "^6.0.1"
    }
  },
  "engines": {
    "node": ">=8"
  }

```

```

    }
  },
  "node_modules/strip-ansi": {
    "version": "6.0.1",
    "resolved": "https://registry.npmjs.org/strip-ansi/-/strip-ansi-6.0.1.tgz",
    "integrity": "sha512-Y38VPSHcQkFrCpFnQ9vuSXMquuv5oXOKpGeT6aGrr3o3Gc9AlVa6JBfUSOCnbxGGZF+/0ooI7KrPuUSztUdU5A==",
    "dependencies": {
      "ansi-regex": "^5.0.1"
    },
    "engines": {
      "node": ">=8"
    }
  },
  "node_modules/strip-bom": {
    "version": "2.0.0",
    "resolved": "https://registry.npmjs.org/strip-bom/-/strip-bom-2.0.0.tgz",
    "integrity": "sha512-ykW7A0T8fKq5w7W7aXG2cKzXWl35L9T58cTYmY0wqnHhM9SfC4AGw5MkVeyPLKhatYNGfwg2Jor8D6QpA==",
    "dependencies": {
      "is-utf8": "^0.2.0"
    },
    "engines": {
      "node": ">=0.10.0"
    }
  },
  "node_modules/supports-color": {
    "version": "7.2.0",
    "resolved": "https://registry.npmjs.org/supports-color/-/supports-color-7.2.0.tgz",
    "integrity": "sha512-qpCAvRL9stuOHveKsn7HncJRvv501qIacKzQlO/+Lwxc9+0q2wLyv4Dfvt80/DPn2pqO  
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    "dependencies": {
      "has-flag": "^4.0.0"
    },
    "engines": {
      "node": ">=8"
    }
  },
  "node_modules/to-regex-range": {
    "version": "5.0.1",
    "resolved": "https://registry.npmjs.org/to-regex-range/-/to-regex-range-5.0.1.tgz",
    "integrity": "sha512-65P7iz6X5yErlcwcgvQxbbIw7Uk3gOy5dIdtZ4rDveLqhrdJP+Li/Hx6tyK0NEb+2GCy  
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    "dependencies": {
      "is-number": "^7.0.0"
    },
    "engines": {
      "node": ">=8.0"
    }
  },
  "node_modules/toidentifier": {

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    "version": "1.0.1",
    "resolved": "https://registry.npmjs.org/toidentifier/-
/toidentifier-1.0.1.tgz",
    "integrity": "sha512-
o5sSPKEkg/DIQNmH43V0/uerLrpzVedkUh8tGNvaeXpfpuwjKenlSox/2O/BTlZUtEe+
JG7s5YhEz608PlAHRA==",
    "engines": {
      "node": ">=0.6"
    }
  },
  "node_modules/touch": {
    "version": "3.1.0",
    "resolved": "https://registry.npmjs.org/touch/-/touch-
3.1.0.tgz",
    "integrity": "sha512-
WBx8Uy5TLtOSRtIq+M03/sKDrXCLHxwDcquSP2c43Le03/9serjQBIztjRz6FkJez9D/
hleyAXTBGLwwZUw9lA==",
    "dependencies": {
      "nopt": "~1.0.10"
    },
    "bin": {
      "nodetouch": "bin/nodetouch.js"
    }
  },
  "node_modules/type-is": {
    "version": "1.6.18",
    "resolved": "https://registry.npmjs.org/type-is/-/type-is-
1.6.18.tgz",
    "integrity": "sha512-
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+iA+ma9BGm06XQBy8g==",
    "dependencies": {
      "media-typer": "0.3.0",
      "mime-types": "~2.1.24"
    },
    "engines": {
      "node": ">= 0.6"
    }
  },
  "node_modules/typedarray": {
    "version": "0.0.6",
    "resolved": "https://registry.npmjs.org/typedarray/-
/typedarray-0.0.6.tgz",
    "integrity": "sha512-
/aCDEGatGvZ2BIk+HmLf4ifCJFwvKFNb9/JezPMulfgFracn9QFcAf5GO8B/mweUjSob
lS5In0cWhqpf5/5PQA==",
    "dependencies": {
      "node_modules/undefsafe": {
        "version": "2.0.5",
        "resolved": "https://registry.npmjs.org/undefsafe/-/undefsafe-
2.0.5.tgz",
        "integrity": "sha512-
WxONCrssBM8TSPRqN5EmsjVrsv4A8X12J4ArBiiayv3DyyG3ZlIg6yysuuSYdZsVz3TK
cTg2fd//Ujd4CHV1iA=="
      }
    },
    "node_modules/unpipe": {
      "version": "1.0.0",
      "resolved": "https://registry.npmjs.org/unpipe/-/unpipe-
1.0.0.tgz",

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    "integrity": "sha512-
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    "engines": {
      "node": ">= 0.8"
    }
  },
  "node_modules/util-deprecate": {
    "version": "1.0.2",
    "resolved": "https://registry.npmjs.org/util-deprecate/-/util-
deprecate-1.0.2.tgz",
    "integrity": "sha512-
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  },
  "node_modules/Utils-merge": {
    "version": "1.0.1",
    "resolved": "https://registry.npmjs.org/Utils-merge/-/utils-
merge-1.0.1.tgz",
    "integrity": "sha512-
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    "engines": {
      "node": ">= 0.4.0"
    }
  },
  "node_modules/vary": {
    "version": "1.1.2",
    "resolved": "https://registry.npmjs.org/vary/-/vary-
1.1.2.tgz",
    "integrity": "sha512-
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    "engines": {
      "node": ">= 0.8"
    }
  },
  "node_modules/wrap-ansi": {
    "version": "7.0.0",
    "resolved": "https://registry.npmjs.org/wrap-ansi/-/wrap-ansi-
7.0.0.tgz",
    "integrity": "sha512-
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XSYG4AUtyt/Fi7D16Q==",
    "dependencies": {
      "ansi-styles": "^4.0.0",
      "string-width": "^4.1.0",
      "strip-ansi": "^6.0.0"
    },
    "engines": {
      "node": ">=10"
    },
    "funding": {
      "url": "https://github.com/chalk/wrap-ansi?sponsor=1"
    }
  },
  "node_modules/wrappy": {
    "version": "1.0.2",
    "resolved": "https://registry.npmjs.org/wrappy/-/wrappy-

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1.0.2.tgz",
  "integrity": "sha512-
14Sp/DRseor9wL6EvV2+TuQn63dMkPjZ/sp9XkghTEbV9KlPS1xUsZ3u7/IQ04wxtcFB
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  },
  "node_modules/xtend": {
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    "resolved": "https://registry.npmjs.org/xtend/-/xtend-
4.0.2.tgz",
    "integrity": "sha512-
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  },
  "node_modules/y18n": {
    "version": "5.0.8",
    "resolved": "https://registry.npmjs.org/y18n/-/y18n-
5.0.8.tgz",
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    }
  },
  "node_modules/yargs": {
    "version": "17.1.1",
    "resolved": "https://registry.npmjs.org/yargs/-/yargs-
17.1.1.tgz",
    "integrity": "sha512-
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PAMQSG5FeySbVcpsPQ==",
    "dependencies": {
      "cliui": "^7.0.2",
      "escalade": "^3.1.1",
      "get-caller-file": "^2.0.5",
      "require-directory": "^2.1.1",
      "string-width": "^4.2.0",
      "y18n": "^5.0.5",
      "yargs-parser": "^20.2.2"
    },
    "engines": {
      "node": ">=12"
    }
  },
  "node_modules/yargs-parser": {
    "version": "20.2.9",
    "resolved": "https://registry.npmjs.org/yargs-parser/-/yargs-
parser-20.2.9.tgz",
    "integrity": "sha512-
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nf+DX0antecpAwSP8w==",
    "engines": {
      "node": ">=10"
    }
  }
},

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"dependencies": {
  "@streamparser/json": {
    "version": "0.0.6",
    "resolved": "https://registry.npmjs.org/@streamparser/json/-/json-0.0.6.tgz",
    "integrity": "sha512-vL9EVn/v+OhZ+Wcs6O4iKE9EUpwHUqHmCtNUMWjqp+6dr85+XPOSGTEsqYNq1Vn04uk9SWl0Vmx9J48ggJVT2Q=="
  },
  "abbrev": {
    "version": "1.1.1",
    "resolved": "https://registry.npmjs.org/abbrev/-/abbrev-1.1.1.tgz",
    "integrity": "sha512-nne9/IiQ/hzIhY6pdDnbBtz7DjPTKrY00P/zvPSm5pOFkl6xuGrGnXn/VtTNNfNtAfZ9/1RtehkszU9qcTii0Q=="
  },
  "accepts": {
    "version": "1.3.8",
    "resolved": "https://registry.npmjs.org/accepts/-/accepts-1.3.8.tgz",
    "integrity": "sha512-YV9C1RqVA8Bz3Qet5vvUqz/c9Xb4zWvGtjgfIvMQU+w1OZ/u9ucZUdHzUodGXSuzU+OJYrOvdJLWtXN27BY="
  },
  "requires": {
    "mime-types": "~2.1.34",
    "negotiator": "0.6.3"
  }
},
"ansi-regex": {
  "version": "5.0.1",
  "resolved": "https://registry.npmjs.org/ansi-regex/-/ansi-regex-5.0.1.tgz",
  "integrity": "sha512-UkApX6N4Qj/wfK/oZtkfzbTb5ZtuFzKGeF3fFBT7n4C7uyHvXwL4zTRzvV5Yq3a2U7LSKAEwqb/PPtOZxprY="
},
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  "version": "4.3.0",
  "resolved": "https://registry.npmjs.org/ansi-styles/-/ansi-styles-4.3.0.tgz",
  "integrity": "sha512-Bb3U1+uAwJhXvvk4dYsGzLw9s4Dq534JW57bR36fe4X0Qj/lUstOv97Y1Bwmcn0xwP/gTbZ0m5H6lV6A="
},
  "requires": {
    "color-convert": "^2.0.1"
  }
},
"anymatch": {
  "version": "3.1.3",
  "resolved": "https://registry.npmjs.org/anymatch/-/anymatch-3.1.3.tgz",
  "integrity": "sha512-KVW3Uwlu44KS5a2G+kHwN5I36I4K05U8w851KwqbXQfU3H844w8d5udnjVPkIu3324rQ3mYwnwU/q17j8="
},
  "requires": {
    "normalize-path": "^3.0.0",
    "picomatch": "^2.0.4"
  }
}

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    },
    "append-field": {
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      "resolved": "https://registry.npmjs.org/append-field/-/append-field-1.0.0.tgz",
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    },
    "array-flatten": {
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      "resolved": "https://registry.npmjs.org/array-flatten/-/array-flatten-1.1.1.tgz",
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    },
    "asap": {
      "version": "2.0.6",
      "resolved": "https://registry.npmjs.org/asap/-/asap-2.0.6.tgz",
      "integrity": "sha512-13469941020116212909106388583Ug15j47Y85n640p9+p2jwuwq1qXp
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    },
    "async": {
      "version": "3.2.4",
      "resolved": "https://registry.npmjs.org/async/-/async-3.2.4.tgz",
      "integrity": "sha512-1161453033042425Wb617th5q88/8pb3PUE41q77ioBv715YnQ7oRf04
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    },
    "axios": {
      "version": "0.21.4",
      "resolved": "https://registry.npmjs.org/axios/-/axios-0.21.4.tgz",
      "integrity": "sha512-1r1a8BHn0iw2dtw4x3Vao/QtjLZTV7H6qvWdZQkmXNpYNDVIayS1G1Hh
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      "requires": {
        "follow-redirects": "^1.14.0"
      }
    },
    "balanced-match": {
      "version": "1.0.2",
      "resolved": "https://registry.npmjs.org/balanced-match/-/balanced-match-1.0.2.tgz",
      "integrity": "sha512-3oSeUO0TMV67hN1AmbXsK44yaqU7tjiHlbrRDZOpH0KW9+CeX4bRAaX0Anxt0tx2MrpRp
WwQaPwIlISEJhYU5Pw=="
    },
    "binary-extensions": {
      "version": "2.2.0",
      "resolved": "https://registry.npmjs.org/binary-extensions/-/binary-extensions-2.2.0.tgz",
      "integrity": "sha512-7Yq4XpZsT1TkH3Wu69h9NtZiHzLpOJ55HHDxSi1Aqzo2/lEpF7lYxZ+voY
jDctJ/IVQbZoJykoeHbhXpOlNBqGNcwXJKJog42E5HDPuWQTSdjCHdihjj0DlnheQ7bl
bT6dHOafNAiS8ooQKA=="
    }
  }

```

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    },
    "bluebird": {
      "version": "3.7.2",
      "resolved": "https://registry.npmjs.org/bluebird/-/bluebird-3.7.2.tgz",
      "integrity": "sha512-XpNj6GDQzdfW+r2Wnn7xiSAd7TM3jzkxGXBGTtWKuSXv1xUV+azxAm8jdWZN06QTQk+2N2XB9jRDkvbmqmcRtg=="
    },
    "body-parser": {
      "version": "1.20.1",
      "resolved": "https://registry.npmjs.org/body-parser/-/body-parser-1.20.1.tgz",
      "integrity": "sha512-  
jWi7abTbYwajOytWCQc37VulmWiRae5RyTpaCyDcS5/lMdtwSz5lOpDE67srw/HYe35f1z3fDQw+3txg7gNtWw==",
      "requires": {
        "bytes": "3.1.2",
        "content-type": "~1.0.4",
        "debug": "2.6.9",
        "depd": "2.0.0",
        "destroy": "1.2.0",
        "http-errors": "2.0.0",
        "iconv-lite": "0.4.24",
        "on-finished": "2.4.1",
        "qs": "6.11.0",
        "raw-body": "2.5.1",
        "type-is": "~1.6.18",
        "unpipe": "1.0.0"
      }
    },
    "brace-expansion": {
      "version": "1.1.11",
      "resolved": "https://registry.npmjs.org/brace-expansion/-/brace-expansion-1.1.11.tgz",
      "integrity": "sha512-iCuPHDFgrHX7H2vEI/5xpz07zSHB00TpuqghmYtVmMO6518mCuRMoOYF1dEB10g187uf  
ozdaHgWKcyYfb61qGiA==",
      "requires": {
        "balanced-match": "^1.0.0",
        "concat-map": "0.0.1"
      }
    },
    "braces": {
      "version": "3.0.2",
      "resolved": "https://registry.npmjs.org/braces/-/braces-3.0.2.tgz",
      "integrity": "sha512-b8um+LlRzM3WDSzvhm6gIz1yfTbBt6YTlcEKAvsmqCZZFw46z626lVj9j1yEPW33H5H+  
1BQpZMP1k81+78Ha0A==",
      "requires": {
        "fill-range": "^7.0.1"
      }
    },
    "buffer-from": {
      "version": "1.1.2",
      "resolved": "https://registry.npmjs.org/buffer-from/-/buffer-from-1.1.2.tgz",
      "integrity": "sha512-Ey+SSQ3T6Rtcrj2kCuY3xXP8buArzviU30V/13fOY51Nq2BvN7cLbrjtcvIF7E6CRVjdwZpu7Axd+bpbU3E="
    }
  }

```

```

E+XQCRwSbaaiChtv6k6Dwgc+bx+Bs6vuKJHHl5kox/BaKbhiXzqQOwK4cO22yElGp2OC
mjwVhT3HmxgyPGnJfQ=="
  },
  "busboy": {
    "version": "1.6.0",
    "resolved": "https://registry.npmjs.org/busboy/-/busboy-
1.6.0.tgz",
    "integrity": "sha512-
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vXiuORqjlHi5q+PYuA==",
    "requires": {
      "streamsearch": "^1.1.0"
    }
  },
  "bytes": {
    "version": "3.1.2",
    "resolved": "https://registry.npmjs.org/bytes/-/bytes-
3.1.2.tgz",
    "integrity": "sha512-
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  },
  "call-bind": {
    "version": "1.0.2",
    "resolved": "https://registry.npmjs.org/call-bind/-/call-bind-
1.0.2.tgz",
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zXf2QGGueWJGTYSqrA==",
    "requires": {
      "function-bind": "^1.1.1",
      "get-intrinsic": "^1.0.2"
    }
  },
  "chalk": {
    "version": "4.1.2",
    "resolved": "https://registry.npmjs.org/chalk/-/chalk-
4.1.2.tgz",
    "integrity": "sha512-
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SLROeyw9CpQ06li4mA==",
    "requires": {
      "ansi-styles": "^4.1.0",
      "supports-color": "^7.1.0"
    }
  },
  "chokidar": {
    "version": "3.5.3",
    "resolved": "https://registry.npmjs.org/chokidar/-/chokidar-
3.5.3.tgz",
    "integrity": "sha512-
Dr3sfKRP6oTcjf2JmUmFJfeVMvXBdegxB0iVQ5eb2V10uFJUCAS80ByZdVAyVb8xXNz3
GjjTgj9kLWsZTqE6kw==",
    "requires": {
      "anymatch": "~3.1.2",
      "braces": "~3.0.2",
      "fsevents": "~2.3.2",
      "glob-parent": "~5.1.2",
      "is-binary-path": "~2.1.0",

```

```

    "is-glob": "~4.0.1",
    "normalize-path": "~3.0.0",
    "readdirp": "~3.6.0"
  },
  },
  "cliui": {
    "version": "7.0.4",
    "resolved": "https://registry.npmjs.org/cliui/-/cliui-
7.0.4.tgz",
    "integrity": "sha512-OcRE68cOsVMXp1Yvonl/fzkQOyjLSu/8bhPDfQt0e0/Eb283TKP20Fs2MqoPsr9SwA59
5rRCA+QMzYc9nBP+JQ==",
    "requires": {
      "string-width": "^4.2.0",
      "strip-ansi": "^6.0.0",
      "wrap-ansi": "^7.0.0"
    }
  },
  },
  "color-convert": {
    "version": "2.0.1",
    "resolved": "https://registry.npmjs.org/color-convert/-/color-
convert-2.0.1.tgz",
    "integrity": "sha512-RRECPsj7iu/xb5oKYcsFHSppFNnsj/52OVTRKb4zP5onXwVF3zVmmToNcOfGC+CRDpfK
/U584fMg38ZHCaElKQ==",
    "requires": {
      "color-name": "~1.1.4"
    }
  },
  },
  "color-name": {
    "version": "1.1.4",
    "resolved": "https://registry.npmjs.org/color-name/-/color-
name-1.1.4.tgz",
    "integrity": "sha512-dOy+3AuW3a2wNbZHIuMZpTcgjGuLU/uBL/ubcZF9OXbDo8ff408yVp5Bf0efS8uEoYo5
q4Fx7dY90gQGxGA==",
    "requires": {
      "commander": {
        "version": "6.2.1",
        "resolved": "https://registry.npmjs.org/commander/-/commander-
6.2.1.tgz",
        "integrity": "sha512-U7VdrJFnJgo4xjrHpTzu0yrHPGImdsmD95ZlgYSEajAn2JKzDhDTPG9kBTefmObL2w/n
geZnilk+OV9CG3d7UA==",
        "requires": {
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            "version": "0.0.1",
            "resolved": "https://registry.npmjs.org/concat-map/-/concat-
map-0.0.1.tgz",
            "integrity": "sha512-Srv4dswyQNBfohGp9o6Yb3Gz3SrUDqBH5rTuhGR7ahtlbYKnVxw2bCFMRljA7EXHa
XZ8wsHdodFvbkKhMqg==",
            "requires": {
              "concat-stream": {
                "version": "1.6.2",
                "resolved": "https://registry.npmjs.org/concat-stream/-
/concat-stream-1.6.2.tgz",
                "integrity": "sha512-27HBghJxjiZtIk3Ycvn/4kbJk/luZuJFfuPEns6LaEvpvG1f0hTea8lilrouyo9mVc2G

```

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  "requires": {
    "buffer-from": "^1.0.0",
    "inherits": "^2.0.3",
    "readable-stream": "^2.2.2",
    "typedarray": "^0.0.6"
  }
},
"content-disposition": {
  "version": "0.5.4",
  "resolved": "https://registry.npmjs.org/content-disposition/-
/content-disposition-0.5.4.tgz",
  "integrity": "sha512-
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  "requires": {
    "safe-buffer": "5.2.1"
  }
},
"content-type": {
  "version": "1.0.5",
  "resolved": "https://registry.npmjs.org/content-type/-
/content-type-1.0.5.tgz",
  "integrity": "sha512-
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},
"cookie": {
  "version": "0.5.0",
  "resolved": "https://registry.npmjs.org/cookie/-/cookie-
0.5.0.tgz",
  "integrity": "sha512-
YZ3GUyn/o8gfKJlnlX7g7xq4gyO6OSuhGPKaaGssGB2qgDUS0gPgtTvoyZLTt9Ab6dC4
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},
"cookie-signature": {
  "version": "1.0.6",
  "resolved": "https://registry.npmjs.org/cookie-signature/-
/cookie-signature-1.0.6.tgz",
  "integrity": "sha512-
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},
"core-util-is": {
  "version": "1.0.3",
  "resolved": "https://registry.npmjs.org/core-util-is/-/core-
util-is-1.0.3.tgz",
  "integrity": "sha512-
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},
"csv": {
  "version": "6.3.0",
  "resolved": "https://registry.npmjs.org/csv/-/csv-6.3.0.tgz",
  "integrity": "sha512-
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LHhswvSxtN5h/72sHg=="
  "requires": {
    "csv-generate": "^4.2.6",

```



```

      "csv-parse": "^5.3.10",
      "csv-stringify": "^6.4.0",
      "stream-transform": "^3.2.6"
    },
    {
      "csv-generate": {
        "version": "4.2.6",
        "resolved": "https://registry.npmjs.org/csv-generate/-/csv-generate-4.2.6.tgz",
        "integrity": "sha512-VtnYqhWLcsUocA346ewFOk+rrqcoT663j11vXzD2uelXq9WguQ3QzDeVD8ISso7hhVtkDSHcWl9psdemeiEHDA=="
      },
      "csv-parse": {
        "version": "5.3.10",
        "resolved": "https://registry.npmjs.org/csv-parse/-/csv-parse-5.3.10.tgz",
        "integrity": "sha512-cTXy6iy0gN5Ha/cGILeDgQE+nKiKDU2m0DjSRdJhr86BN3cM7oefBsTk2aH0LQeaYtL7Z7HvW+jYoadmdhzeDA=="
      },
      "csv-stringify": {
        "version": "6.4.0",
        "resolved": "https://registry.npmjs.org/csv-stringify/-/csv-stringify-6.4.0.tgz",
        "integrity": "sha512-HQsw0QXiN5fdlO+R8/JzCZnR3Fqp8E87YVnhHlaPtNGJjt6fffbV0LpOkieIb1x6V1+xt878IYq77SpXHWaQKkA=="
      },
      "csvtojson": {
        "version": "2.0.10",
        "resolved": "https://registry.npmjs.org/csvtojson/-/csvtojson-2.0.10.tgz",
        "integrity": "sha512-1UWFxGKYhraKCW8Qghz6Z0f2l/PqB1W3AO0HKJzGIQ5JRS1R651ekJDiGJbBT4sRNNv5ddnSGVEnsXP9XRCVpQ==",
        "requires": {
          "bluebird": "^3.5.1",
          "lodash": "^4.17.3",
          "strip-bom": "^2.0.0"
        }
      },
      "debug": {
        "version": "2.6.9",
        "resolved": "https://registry.npmjs.org/debug/-/debug-2.6.9.tgz",
        "integrity": "sha512-bC7ElrdJaJnPbAP+1EotYvqZsb3ecl5wi6Bfi6BJTUcNowp6cvspg0jXznRTKDjm/E7AdgFBVeAPVMNcKGsHMA==",
        "requires": {
          "ms": "2.0.0"
        }
      },
      "depd": {
        "version": "2.0.0",
        "resolved": "https://registry.npmjs.org/depd/-/depd-2.0.0.tgz",
        "integrity": "sha512-g7nH6P6dyDioJogAAGprGpCtVImJhpPk/roCzdb3fIh61/s/nPsfR6onyMwkCAR/OlC3

```

```

yBC01ESvUoQEAssIrw=="
  },
  "destroy": {
    "version": "1.2.0",
    "resolved": "https://registry.npmjs.org/destroy/-/destroy-
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    "integrity": "sha512-
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  },
  "dezalgo": {
    "version": "1.0.4",
    "resolved": "https://registry.npmjs.org/dezalgo/-/dezalgo-
1.0.4.tgz",
    "integrity": "sha512-
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RqeSBQzmWUMq7zvVig==",
    "requires": {
      "asap": "^2.0.0",
      "wrappy": "1"
    }
  },
  "ee-first": {
    "version": "1.1.1",
    "resolved": "https://registry.npmjs.org/ee-first/-/ee-first-
1.1.1.tgz",
    "integrity": "sha512-
WMwm9LhRUo+WUaRN+vRuETqG89IgzphVSNkdFgeb6sS/E4OrDIN7t48CAewSHXc6C81e
fD8KKfr5vY61brQlow=="
  },
  "ejs": {
    "version": "3.1.8",
    "resolved": "https://registry.npmjs.org/ejs/-/ejs-3.1.8.tgz",
    "integrity": "sha512-
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xQCo6xlgmTS+oTGEQ==",
    "requires": {
      "jake": "^10.8.5"
    }
  },
  "emoji-regex": {
    "version": "8.0.0",
    "resolved": "https://registry.npmjs.org/emoji-regex/-/emoji-
regex-8.0.0.tgz",
    "integrity": "sha512-
MSjYzCWNOA0ewAHpz0MxpYFvwg6yjj1NG3xteoqz644VCo/RPgnr1/GGt+ic3iJTzQ8E
u3TdM14SawnVUmGE6A=="
  },
  "encodeurl": {
    "version": "1.0.2",
    "resolved": "https://registry.npmjs.org/encodeurl/-/encodeurl-
1.0.2.tgz",
    "integrity": "sha512-
TPJXq8JqFaVym2CWmPvnP2Iyo4ZSM7/QKcSmuMLDObfpH5fi7RUGmd/rTDf+rut/said
iQEeVTNgAmJEdAOx0w=="
  },
  "escalade": {
    "version": "3.1.1",
    "resolved": "https://registry.npmjs.org/escalade/-/escalade-

```

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3.1.1.tgz",
  "integrity": "sha512-
k0er2gUkLf800zKJiAhmkTnJlTvINGv7ygDNPbeIsX/TJjGJZHuh9B2UxbsaEkmlEo9M
fhrSzmhIlhRlI2GXnw=="
},
  "escape-html": {
    "version": "1.0.3",
    "resolved": "https://registry.npmjs.org/escape-html/-/escape-
html-1.0.3.tgz",
    "integrity": "sha512-
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rWrGs/6Jy8OMuyj9ow=="
},
  "etag": {
    "version": "1.8.1",
    "resolved": "https://registry.npmjs.org/etag/-/etag-
1.8.1.tgz",
    "integrity": "sha512-
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VF/KEZWufBfdC1McPg=="
},
  "express": {
    "version": "4.18.2",
    "resolved": "https://registry.npmjs.org/express/-/express-
4.18.2.tgz",
    "integrity": "sha512-
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ATNyBExtalisDbuMqQ==",
    "requires": {
      "accepts": "~1.3.8",
      "array-flatten": "1.1.1",
      "body-parser": "1.20.1",
      "content-disposition": "0.5.4",
      "content-type": "~1.0.4",
      "cookie": "0.5.0",
      "cookie-signature": "1.0.6",
      "debug": "2.6.9",
      "depd": "2.0.0",
      "encodeurl": "~1.0.2",
      "escape-html": "~1.0.3",
      "etag": "~1.8.1",
      "finalhandler": "1.2.0",
      "fresh": "0.5.2",
      "http-errors": "2.0.0",
      "merge-descriptors": "1.0.1",
      "methods": "~1.1.2",
      "on-finished": "2.4.1",
      "parseurl": "~1.3.3",
      "path-to-regexp": "0.1.7",
      "proxy-addr": "~2.0.7",
      "qs": "6.11.0",
      "range-parser": "~1.2.1",
      "safe-buffer": "5.2.1",
      "send": "0.18.0",
      "serve-static": "1.15.0",
      "setprototypeof": "1.2.0",
      "statuses": "2.0.1",
      "type-is": "~1.6.18",
      "utils-merge": "1.0.1",

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    "vary": "~1.1.2"
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  "filelist": {
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    "integrity": "sha512-wlcEuf3S+DrLCQL7ET6kz+gmlJdbq9J7yXCSjK/OZCPA+qEN1WyF4ZAf0YYJa4/shHJra2t/d/r8SV4Ji+x+8Q==",
    "requires": {
      "minimatch": "^5.0.1"
    },
    "dependencies": {
      "brace-expansion": {
        "version": "2.0.1",
        "resolved": "https://registry.npmjs.org/brace-expansion/-/brace-expansion-2.0.1.tgz",
        "integrity": "sha512-XnAIVQ8eM+kC6aULx6wuQiwVsnzsi9d3WxzV3FpWTGA19F621kwdbwAcFKXgKUHZWsy+mY6iLlSHTxWEFCytDA==",
        "requires": {
          "balanced-match": "^1.0.0"
        }
      },
      "minimatch": {
        "version": "5.1.6",
        "resolved": "https://registry.npmjs.org/minimatch/-/minimatch-5.1.6.tgz",
        "integrity": "sha512-lKwV/lbrpG6mBUFHtb7NUmtABCb2WZZmm2wNiOA5hAb8VdCS4B3dtMWyvcoViccwAW/C OERjXLt0zPlzXUN26g==",
        "requires": {
          "brace-expansion": "^2.0.1"
        }
      }
    },
  },
  "fill-range": {
    "version": "7.0.1",
    "resolved": "https://registry.npmjs.org/fill-range/-/fill-range-7.0.1.tgz",
    "integrity": "sha512-qOo9F+dMUmC2Lcb4BbVvnKJxTPjCm+RRpe4gDuGrzkL7mEVl/djYSu2OdQ2Pa302N4oqkSg9ir6jaLWJ2USVpQ==",
    "requires": {
      "to-regex-range": "^5.0.1"
    }
  },
  "finalhandler": {
    "version": "1.2.0",
    "resolved": "https://registry.npmjs.org/finalhandler/-/finalhandler-1.2.0.tgz",
    "integrity": "sha512-SXZPf7hU6XO9Imlvm7gzEF45I2bdaVQVCh2UzeQE5tg264Xw4P1HiUEbHq+Gqr0EMPHkR7IE9zQs1BZcYdUU+A==",
    "requires": {
      "debug": "2.6.9",
      "encodeurl": "~1.0.2",

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    "escape-html": "~1.0.3",
    "on-finished": "2.4.1",
    "parseurl": "~1.3.3",
    "statuses": "2.0.1",
    "unpipe": "~1.0.0"
  }
},
"follow-redirects": {
  "version": "1.15.2",
  "resolved": "https://registry.npmjs.org/follow-redirects/-
/follow-redirects-1.15.2.tgz",
  "integrity": "sha512-
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Tq3221ye5qTJP91JwA=="
},
"formidable": {
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  "resolved": "https://registry.npmjs.org/formidable/-
/formidable-2.1.1.tgz",
  "integrity": "sha512-
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b98WG3nxtlF5C7bvUQ=="
  "requires": {
    "dezalgo": "^1.0.4",
    "hexoid": "^1.0.0",
    "once": "^1.4.0",
    "qs": "^6.11.0"
  }
},
"forwarded": {
  "version": "0.2.0",
  "resolved": "https://registry.npmjs.org/forwarded/-/forwarded-
0.2.0.tgz",
  "integrity": "sha512-
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9L1KNjk/Nt6MT9aYow=="
},
"fresh": {
  "version": "0.5.2",
  "resolved": "https://registry.npmjs.org/fresh/-/fresh-
0.5.2.tgz",
  "integrity": "sha512-
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9d2pVXVXPdYTP9ej8Q=="
},
"fsevents": {
  "version": "2.3.2",
  "resolved": "https://registry.npmjs.org/fsevents/-/fsevents-
2.3.2.tgz",
  "integrity": "sha512-
xiqMQR4xAeHTuB9uWm+fFRcIOgKBMiOBP+eXiyT7jsgVCq1bkVygt00oASowB7EdtpOH
aaPgKt812P9ab+DDKA=="
  "optional": true
},
"function-bind": {
  "version": "1.1.1",
  "resolved": "https://registry.npmjs.org/function-bind/-
/function-bind-1.1.1.tgz",
  "integrity": "sha512-

```

```

yIovAzMX49sF8Yl58fSCWJ5svSLuaibPxXQJFLmBObTuCr0Mf1KiPopGM9NiFjiYBCbf
aa2Fh6breQ6ANVTIOA=="
  },
  "get-caller-file": {
    "version": "2.0.5",
    "resolved": "https://registry.npmjs.org/get-caller-file/-/get-
caller-file-2.0.5.tgz",
    "integrity": "sha512-DyFP3BM/3YHTQOCUL/w0OZHR0lpKeGrxotcHWcqNEdnltqFwXVfhEBQ94eIo34AfQpo0
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  },
  "get-intrinsic": {
    "version": "1.2.0",
    "resolved": "https://registry.npmjs.org/get-intrinsic/-/get-
intrinsic-1.2.0.tgz",
    "integrity": "sha512-L049y6nFOuom5wGyRc3/gdTLO94dySVKRACjlRmJZBQXlbTMhtNigkWkUHq+jYmZvKf1
4EWlEoJnnjbmoHij0Q==",
    "requires": {
      "function-bind": "^1.1.1",
      "has": "^1.0.3",
      "has-symbols": "^1.0.3"
    }
  },
  "glob-parent": {
    "version": "5.1.2",
    "resolved": "https://registry.npmjs.org/glob-parent/-/glob-
parent-5.1.2.tgz",
    "integrity": "sha512-AOISQCEpiJYwP3ARnGx+5VnTu2HBYdzbGP45eLw1vr3zB3vZLeyed1sC9hnbcOc9/Sr
MyM5RPQrkGz4aS9Zow==",
    "requires": {
      "is-glob": "^4.0.1"
    }
  },
  "has": {
    "version": "1.0.3",
    "resolved": "https://registry.npmjs.org/has/-/has-1.0.3.tgz",
    "integrity": "sha512-f2dvO0VU6Oej7RkWWJGrehjybzMAjFp5/VKPP5tTpWIV4JHHZK1/BxbFRtf/siA2SWTe09
caDmVtYYzWEIbBS4zw==",
    "requires": {
      "function-bind": "^1.1.1"
    }
  },
  "has-flag": {
    "version": "4.0.0",
    "resolved": "https://registry.npmjs.org/has-flag/-/has-flag-
4.0.0.tgz",
    "integrity": "sha512-EykJT/Q1KjTWctppgIAgfSO0tKVuZUjhgMr17kqTumMl6Afv3EISleU7qZUzoXDFTAHT
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  },
  "has-symbols": {
    "version": "1.0.3",
    "resolved": "https://registry.npmjs.org/has-symbols/-/has-
symbols-1.0.3.tgz",
    "integrity": "sha512-lHKE8l9jWu7aR3Qw82wWk00vVjYM8jMEheQ4YPN+LwUfJHcQ82y7F+gX+JCYhT4jnZT
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  },
  "hexoid": {
    "version": "1.0.0",
    "resolved": "https://registry.npmjs.org/hexoid/-/hexoid-
1.0.0.tgz",
    "integrity": "sha512-
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  },
  "http-errors": {
    "version": "2.0.0",
    "resolved": "https://registry.npmjs.org/http-errors/-/http-
errors-2.0.0.tgz",
    "integrity": "sha512-
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DWy5Wt9Wo+TURtOYSQ==",
    "requires": {
      "depd": "2.0.0",
      "inherits": "2.0.4",
      "setprototypeof": "1.2.0",
      "statuses": "2.0.1",
      "toidentifier": "1.0.1"
    }
  },
  "iconv-lite": {
    "version": "0.4.24",
    "resolved": "https://registry.npmjs.org/iconv-lite/-/iconv-
lite-0.4.24.tgz",
    "integrity": "sha512-
v3MXnZAcvnywkTUEZomIActle7RXNeedOR31ww17VlyoXO4Qi9arvSenNQWne1TcRwhC
LlHwLI2lbEqdpj8/rA==",
    "requires": {
      "safer-buffer": ">= 2.1.2 < 3"
    }
  },
  "ignore-by-default": {
    "version": "1.0.1",
    "resolved": "https://registry.npmjs.org/ignore-by-default/-
/ignore-by-default-1.0.1.tgz",
    "integrity": "sha512-
Ius2VYcGNk7T90CppJqcIkS5ooHUYzYIQK+ClZfMfMNFEE9VSE73Fq+906u/CWu92x4gz
ZMWOWfFYckPObzdEbA=="
  },
  "inherits": {
    "version": "2.0.4",
    "resolved": "https://registry.npmjs.org/inherits/-/inherits-
2.0.4.tgz",
    "integrity": "sha512-
k/vGaX4/Yla3WzyMCvtQOXYeIHvqOKtnqBduzTHpzpQZzAskKMhZ2K+EnBiSM9zGSoIF
eMpXKxa4dYeZIQqewQ=="
  },
  "ipaddr.js": {
    "version": "1.9.1",
    "resolved": "https://registry.npmjs.org/ipaddr.js/-/ipaddr.js-
1.9.1.tgz",
    "integrity": "sha512-
0KI/607xoxSToH7GjN1FfSbLoU0+btTicjsQSQWlh/hZykn8KpmMf7uYwPW3R+akZ6R/
w18ZlXSHBYXiYUPO3g=="

```

```

    },
    "is-binary-path": {
      "version": "2.1.0",
      "resolved": "https://registry.npmjs.org/is-binary-path/-/is-binary-path-2.1.0.tgz",
      "integrity": "sha512-ZMERYes6pDydyuGidse70sHxtbI7WVeUEozgR/g7rd0xUimYNlvZRE/K2MgZTjWy725I
felLeVcEM97mmtRGXw==",
      "requires": {
        "binary-extensions": "^2.0.0"
      }
    },
    "is-extglob": {
      "version": "2.1.1",
      "resolved": "https://registry.npmjs.org/is-extglob/-/is-extglob-2.1.1.tgz",
      "integrity": "sha512-SbKbANKn603Vi4jEZv49LeVJMn4yGwsbzZworEoyEiutsN3nJYdbO36zfhGJ6QEDpOZI
FkDtnq5JRxmvl3jsoQ==",
    },
    "is-fullwidth-code-point": {
      "version": "3.0.0",
      "resolved": "https://registry.npmjs.org/is-fullwidth-code-point/-/is-fullwidth-code-point-3.0.0.tgz",
      "integrity": "sha512-zymm5+u+sCsSWyD9qNaejV3DFvChkclKdizYaJUuHA83RLjb7nSuGnddCHGv0hk+KY7B
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    },
    "is-glob": {
      "version": "4.0.3",
      "resolved": "https://registry.npmjs.org/is-glob/-/is-glob-4.0.3.tgz",
      "integrity": "sha512-xelSayHH36ZgE7ZWhli7pW34hNbNl8Ojv5KVmkJD4hBdD3th8Tfk9vYasLM+mXWOZhFk
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      "requires": {
        "is-extglob": "^2.1.1"
      }
    },
    "is-number": {
      "version": "7.0.0",
      "resolved": "https://registry.npmjs.org/is-number/-/is-number-7.0.0.tgz",
      "integrity": "sha512-41Cifkg6e8TylSpdtTpeLVMqvSBEVzTttHvERD741+pnZ8ANv0004MRL43QKPD1K9cGv
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    },
    "is-utf8": {
      "version": "0.2.1",
      "resolved": "https://registry.npmjs.org/is-utf8/-/is-utf8-0.2.1.tgz",
      "integrity": "sha512-rMPYvCzsXyWIsl dgLaSoPlw5PfoB/ssr7hY4pLfcodrA5M/eArzala9VmTiNIBNMjOG
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    },
    "isarray": {
      "version": "1.0.0",
      "resolved": "https://registry.npmjs.org/isarray/-/isarray-1.0.0.tgz",

```



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    "integrity": "sha512-
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  },
  "jake": {
    "version": "10.8.5",
    "resolved": "https://registry.npmjs.org/jake/-/jake-
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    "integrity": "sha512-
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    "requires": {
      "async": "^3.2.3",
      "chalk": "^4.0.2",
      "filelist": "^1.0.1",
      "minimatch": "^3.0.4"
    }
  },
  "json-to-csv-export": {
    "version": "2.1.1",
    "resolved": "https://registry.npmjs.org/json-to-csv-export/-
/json-to-csv-export-2.1.1.tgz",
    "integrity": "sha512-
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  },
  "json2csv": {
    "version": "6.0.0-alpha.2",
    "resolved": "https://registry.npmjs.org/json2csv/-/json2csv-
6.0.0-alpha.2.tgz",
    "integrity": "sha512-
nJ3oP6QxN8z69ITlHmrJdfVxhU1kLTBVgMfRnNZc37YFY+jZ4nU27rBGxT4vaqM/KUCa
vLRhntmTuBFqZLBUcA==",
    "requires": {
      "@streamparser/json": "^0.0.6",
      "commander": "^6.2.0",
      "lodash.get": "^4.4.2"
    }
  },
  "localtunnel": {
    "version": "2.0.2",
    "resolved": "https://registry.npmjs.org/localtunnel/-
/localtunnel-2.0.2.tgz",
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LGBNL5tYHq5WF3Nug==",
    "requires": {
      "axios": "0.21.4",
      "debug": "4.3.2",
      "openurl": "1.1.1",
      "yargs": "17.1.1"
    }
  },
  "dependencies": {
    "debug": {
      "version": "4.3.2",
      "resolved": "https://registry.npmjs.org/debug/-/debug-
4.3.2.tgz",
      "integrity": "sha512-
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```

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    "requires": {
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    }
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    "version": "2.1.2",
    "resolved": "https://registry.npmjs.org/ms/-/ms-
2.1.2.tgz",
    "integrity": "sha512-
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  }
},
"lodash": {
  "version": "4.17.21",
  "resolved": "https://registry.npmjs.org/lodash/-/lodash-
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  "integrity": "sha512-
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},
"lodash.get": {
  "version": "4.4.2",
  "resolved": "https://registry.npmjs.org/lodash.get/-
/lodash.get-4.4.2.tgz",
  "integrity": "sha512-
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},
"media-typer": {
  "version": "0.3.0",
  "resolved": "https://registry.npmjs.org/media-typer/-/media-
typer-0.3.0.tgz",
  "integrity": "sha512-
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},
"merge-descriptors": {
  "version": "1.0.1",
  "resolved": "https://registry.npmjs.org/merge-descriptors/-
/merge-descriptors-1.0.1.tgz",
  "integrity": "sha512-
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},
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  "resolved": "https://registry.npmjs.org/methods/-/methods-
1.1.2.tgz",
  "integrity": "sha512-
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},
"mime": {
  "version": "1.6.0",
  "resolved": "https://registry.npmjs.org/mime/-/mime-
1.6.0.tgz",

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    "integrity": "sha512-
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  },
  "mime-db": {
    "version": "1.52.0",
    "resolved": "https://registry.npmjs.org/mime-db/-/mime-db-
1.52.0.tgz",
    "integrity": "sha512-
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  },
  "mime-types": {
    "version": "2.1.35",
    "resolved": "https://registry.npmjs.org/mime-types/-/mime-
types-2.1.35.tgz",
    "integrity": "sha512-
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    "requires": {
      "mime-db": "1.52.0"
    }
  },
  "minimatch": {
    "version": "3.1.2",
    "resolved": "https://registry.npmjs.org/minimatch/-/minimatch-
3.1.2.tgz",
    "integrity": "sha512-
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cX6t3UO+K5aqBQOIHW==",
    "requires": {
      "brace-expansion": "^1.1.7"
    }
  },
  "minimist": {
    "version": "1.2.8",
    "resolved": "https://registry.npmjs.org/minimist/-/minimist-
1.2.8.tgz",
    "integrity": "sha512-
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yvsHCpWqqWqAxb0zCA=="
  },
  "mkdirp": {
    "version": "0.5.6",
    "resolved": "https://registry.npmjs.org/mkdirp/-/mkdirp-
0.5.6.tgz",
    "integrity": "sha512-
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    "requires": {
      "minimist": "^1.2.6"
    }
  },
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    "version": "2.0.0",
    "resolved": "https://registry.npmjs.org/ms/-/ms-2.0.0.tgz",
    "integrity": "sha512-
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    },
    "multer": {
      "version": "1.4.5-lts.1",
      "resolved": "https://registry.npmjs.org/multer/-/multer-1.4.5-lts.1.tgz",
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rG3/D4dJ7+dGctcCQQ==",
      "requires": {
        "append-field": "^1.0.0",
        "busboy": "^1.0.0",
        "concat-stream": "^1.5.2",
        "mkdirp": "^0.5.4",
        "object-assign": "^4.1.1",
        "type-is": "^1.6.4",
        "xtend": "^4.0.0"
      }
    },
    "negotiator": {
      "version": "0.6.3",
      "resolved": "https://registry.npmjs.org/negotiator/-/negotiator-0.6.3.tgz",
      "integrity": "sha512-+EUSqGPLsM+j/zdChZjsnX51g4XrHFOIXwfnCVPGLQk/k5giakcKsuxCObBRu6DSm9op
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    },
    "nodemon": {
      "version": "2.0.22",
      "resolved": "https://registry.npmjs.org/nodemon/-/nodemon-2.0.22.tgz",
      "integrity": "sha512-B8YqaKMmyuCO7BowFlZl/mkPqLk6cs/l63Ojtd6otKjMx47Dq1utxfRxcavH1I7VSaL8
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      "requires": {
        "chokidar": "^3.5.2",
        "debug": "^3.2.7",
        "ignore-by-default": "^1.0.1",
        "minimatch": "^3.1.2",
        "pstree.remy": "^1.1.8",
        "semver": "^5.7.1",
        "simple-update-notifier": "^1.0.7",
        "supports-color": "^5.5.0",
        "touch": "^3.1.0",
        "undefsafe": "^2.0.5"
      }
    },
    "dependencies": {
      "debug": {
        "version": "3.2.7",
        "resolved": "https://registry.npmjs.org/debug/-/debug-3.2.7.tgz",
        "integrity": "sha512-+EUSqGPLsM+j/zdChZjsnX51g4XrHFOIXwfnCVPGLQk/k5giakcKsuxCObBRu6DSm9op
w/O6slWbJdghQM4bBg==",
        "requires": {
          "ms": "^2.1.1"
        }
      }
    },
    "has-flag": {
      "version": "3.0.0",

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      "resolved": "https://registry.npmjs.org/has-flag/-/has-
flag-3.0.0.tgz",
      "integrity": "sha512-
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    },
    "ms": {
      "version": "2.1.3",
      "resolved": "https://registry.npmjs.org/ms/-/ms-
2.1.3.tgz",
      "integrity": "sha512-
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AOtHnSO/tXtF3WRT1A=="
    },
    "supports-color": {
      "version": "5.5.0",
      "resolved": "https://registry.npmjs.org/supports-color/-
/supports-color-5.5.0.tgz",
      "integrity": "sha512-
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      "requires": {
        "has-flag": "^3.0.0"
      }
    }
  },
  "nopt": {
    "version": "1.0.10",
    "resolved": "https://registry.npmjs.org/nopt/-/nopt-
1.0.10.tgz",
    "integrity": "sha512-
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RypJnlEOhd8vloNKYg==",
    "requires": {
      "abbrev": "1"
    }
  },
  "normalize-path": {
    "version": "3.0.0",
    "resolved": "https://registry.npmjs.org/normalize-path/-
/normalize-path-3.0.0.tgz",
    "integrity": "sha512-
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  },
  "object-assign": {
    "version": "4.1.1",
    "resolved": "https://registry.npmjs.org/object-assign/-
/object-assign-4.1.1.tgz",
    "integrity": "sha512-
rJgTQnkUnH1sFw8yT6VSU3zD3sWmu6sZhIseY8VX+GRu3P6F7Fu+JNDoxfklElbLJSnc
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  },
  "object-inspect": {
    "version": "1.12.3",
    "resolved": "https://registry.npmjs.org/object-inspect/-
/object-inspect-1.12.3.tgz",
    "integrity": "sha512-

```

```

geUvdK7c+eizMNUdKRpWlWJwgfOiOeHbxBR/hLXK1aT6zmVSO0jsQcs7fj6MGw89jC/c
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    "on-finished": {
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      "resolved": "https://registry.npmjs.org/on-finished/-/on-
finished-2.4.1.tgz",
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      "requires": {
        "ee-first": "1.1.1"
      }
    },
    "once": {
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      "resolved": "https://registry.npmjs.org/once/-/once-
1.4.0.tgz",
      "integrity": "sha512-lNaJgI+2Q5URQBkccEKHTQOPaXdUxnZZELQTZY0MFUAuaEqe1E+Nyvgdz/aIyNi6Z9Mz
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      "requires": {
        "wrappy": "1"
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    },
    "openurl": {
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      "resolved": "https://registry.npmjs.org/openurl/-/openurl-
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      "integrity": "sha512-d/gTkTb1l1GKz5k3XE3XFV/PxQ1k45zDqGP2OA7YhgSaLoqm6qRvARAZOFer1fcXritW
lGBRCu/UgeS4HAnXAA=="
    },
    "papaparse": {
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      "resolved": "https://registry.npmjs.org/papaparse/-/papaparse-
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      "integrity": "sha512-HipMsgJkZu8br23pW15uvo6sib6wne/4woLZPlFf3rpDyMe9ywEXUsuD7+6K9PRkJ1VT
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    },
    "parseurl": {
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      "resolved": "https://registry.npmjs.org/parseurl/-/parseurl-
1.3.3.tgz",
      "integrity": "sha512-CiyeOxFT/JZyN5m0z9PfXw4SCBJ6Syzg1Dpl0wqjlhDEGGBP1GnsUVEL0p63hoG1fcj3
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    "path-to-regexp": {
      "version": "0.1.7",
      "resolved": "https://registry.npmjs.org/path-to-regexp/-/path-
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      "integrity": "sha512-DfKhzDFKblXm0y8Zm3g3K8bRyKnc8R3KcQ4pGdo82LgNSqGqN5NQ6OdlkX4oQ8Y5j
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    },
    "picomatch": {
      "version": "2.3.1",

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  },
  "process-nextick-args": {
    "version": "2.0.1",
    "resolved": "https://registry.npmjs.org/process-nextick-args/-
/process-nextick-args-2.0.1.tgz",
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  },
  "proxy-addr": {
    "version": "2.0.7",
    "resolved": "https://registry.npmjs.org/proxy-addr/-/proxy-
addr-2.0.7.tgz",
    "integrity": "sha512-
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JEdZU7KMraoK1+XYAg==",
    "requires": {
      "forwarded": "0.2.0",
      "ipaddr.js": "1.9.1"
    }
  },
  "pstree.remy": {
    "version": "1.1.8",
    "resolved": "https://registry.npmjs.org/pstree.remy/-
/pstree.remy-1.1.8.tgz",
    "integrity": "sha512-
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  },
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    "resolved": "https://registry.npmjs.org/python-shell/-/python-
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    "integrity": "sha512-
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bCY0TznnHooNsCo0/w=="
  },
  "qs": {
    "version": "6.11.0",
    "resolved": "https://registry.npmjs.org/qs/-/qs-6.11.0.tgz",
    "integrity": "sha512-
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xGq52Xu/MaJzRkIk4Q==",
    "requires": {
      "side-channel": "^1.0.4"
    }
  },
  "range-parser": {
    "version": "1.2.1",
    "resolved": "https://registry.npmjs.org/range-parser/-/range-
parser-1.2.1.tgz",
    "integrity": "sha512-
Hrgsx+orqoygnmhFbKaHE6c296J+HTAQXoxEF6gNupROmmGJRozzfG3ccAveqCBwr/2
yxQ5BVd/GTl5agOwSg=="
  }
}

```

```

    },
    "raw-body": {
      "version": "2.5.1",
      "resolved": "https://registry.npmjs.org/raw-body/-/raw-body-2.5.1.tgz",
      "integrity": "sha512-qqJBtEyVgS0ZmPGdCFPWJ3FreoqvG4MVQln/kCgF70lq95IbOp0/BWyMwbdtn4VTvkM8Y7khCQ2Xgk/tcrCXig==",
      "requires": {
        "bytes": "3.1.2",
        "http-errors": "2.0.0",
        "iconv-lite": "0.4.24",
        "unpipe": "1.0.0"
      }
    },
    "readable-stream": {
      "version": "2.3.8",
      "resolved": "https://registry.npmjs.org/readable-stream/-/readable-stream-2.3.8.tgz",
      "integrity": "sha512-8p0AUK4XODgIewSi0l8Epjs+EVnWiK7NoDIEGU0HhE7+ZyY8D1IMY7odu5lRrFXGg71L15KG8QrPmum45RTtdA==",
      "requires": {
        "core-util-is": "~1.0.0",
        "inherits": "~2.0.3",
        "isarray": "~1.0.0",
        "process-nextick-args": "~2.0.0",
        "safe-buffer": "~5.1.1",
        "string_decoder": "~1.1.1",
        "util-deprecate": "~1.0.1"
      }
    },
    "dependencies": {
      "safe-buffer": {
        "version": "5.1.2",
        "resolved": "https://registry.npmjs.org/safe-buffer/-/safe-buffer-5.1.2.tgz",
        "integrity": "sha512-Gd2UZBJDkXl1Y7GbJxfsE8/nvKkUEU1G38c1siN6QP6a9PT9MmHB8GnpsscSmMJSoF8LOIrt8ud/wPtojys4G6+g=="
      }
    }
  },
  "readdirp": {
    "version": "3.6.0",
    "resolved": "https://registry.npmjs.org/readdirp/-/readdirp-3.6.0.tgz",
    "integrity": "sha512-kDSzkeRgUDqoUdI4I314YFO34duFV4R1Gb7Y5Rn0gUHOw6K+uXNVs0lP6GnQmX1Kn556jKv+fYsgzwFpLg==",
    "requires": {
      "picomatch": "^2.2.1"
    }
  },
  "require-directory": {
    "version": "2.1.1",
    "resolved": "https://registry.npmjs.org/require-directory/-/require-directory-2.1.1.tgz",
    "integrity": "sha512-fGxExI7+wsG9xrvdjsrmlM22OMTTiHRwAMroiEeMgq8gzoLC/PQr7RsRDSTLUg/bZAZtF

```



```

+TVIkHc6/4RIKrui+Q=="
  },
  "safe-buffer": {
    "version": "5.2.1",
    "resolved": "https://registry.npmjs.org/safe-buffer/-/safe-
buffer-5.2.1.tgz",
    "integrity": "sha512-
rp3So07KcdmmKbGvgaNxQsJr7bGVSVk5S9Eq1F+ppbRo70+YeaDxkw5Dd8NPN+GD6bjn
Ym2VuPuCXmpuYvmCXQ=="
  },
  "safer-buffer": {
    "version": "2.1.2",
    "resolved": "https://registry.npmjs.org/safer-buffer/-/safer-
buffer-2.1.2.tgz",
    "integrity": "sha512-
YZo3K82SD7Riyi0E1EQPojLz7kpepnSQI9IyPbHHg1XXXevb5dJI7tpyN2ADxGcQbHG7
vcyRHk0cbwqcQriUtg=="
  },
  "semver": {
    "version": "5.7.1",
    "resolved": "https://registry.npmjs.org/semver/-/semver-
5.7.1.tgz",
    "integrity": "sha512-
sauaDf/PZdVgrLTNYHRtpXaliRiKcaebiKQ1BJdpQlWH21CvexQdX55snPFyK7QzpuDq
bCI0qXFfOasHdyNDGQ=="
  },
  "send": {
    "version": "0.18.0",
    "resolved": "https://registry.npmjs.org/send/-/send-
0.18.0.tgz",
    "integrity": "sha512-
qqWzuOjSFOuqPjFe4NOsMLafToQQwBSOEpS+FwEt3A2V3vKubTquT3vmLTQpFgMXp8A1
FWFuPlqKaJZOtPpVXg==",
    "requires": {
      "debug": "2.6.9",
      "depd": "2.0.0",
      "destroy": "1.2.0",
      "encodeurl": "~1.0.2",
      "escape-html": "~1.0.3",
      "etag": "~1.8.1",
      "fresh": "0.5.2",
      "http-errors": "2.0.0",
      "mime": "1.6.0",
      "ms": "2.1.3",
      "on-finished": "2.4.1",
      "range-parser": "~1.2.1",
      "statuses": "2.0.1"
    },
  },
  "dependencies": {
    "ms": {
      "version": "2.1.3",
      "resolved": "https://registry.npmjs.org/ms/-/ms-
2.1.3.tgz",
      "integrity": "sha512-
6FlzubTLZG3J2a/NVCAleEhjqzq5oxgHyaCU9yYXvcLsvoVaHJq/s5xXI6/XXP6tz7R9x
AOtHnSO/tXtF3WRTlA=="
    }
  }
},

```

```

    "serve-static": {
      "version": "1.15.0",
      "resolved": "https://registry.npmjs.org/serve-static/-/serve-
static-1.15.0.tgz",
      "integrity": "sha512-XGuRDNjXUIjsUL0v16nSD7cwURuzEgglbOaFuZM9g3kwDXOWVTck0jLzjPzGD+TazWbb
oZYu52/9/XPdUgne9g==",
      "requires": {
        "encodeurl": "~1.0.2",
        "escape-html": "~1.0.3",
        "parseurl": "~1.3.3",
        "send": "0.18.0"
      }
    },
    "setprototypeof": {
      "version": "1.2.0",
      "resolved": "https://registry.npmjs.org/setprototypeof/-
/setprototypeof-1.2.0.tgz",
      "integrity": "sha512-E5LDX7Wrp85Kil5bhZv46j8jOeboKq5JMmYM3gVGdGH8xFpPWxUMsNr1ODCrkoxMEeNi
/XZIwuRvY4XNwYMJpw==",
      "requires": {
        "side-channel": {
          "version": "1.0.4",
          "resolved": "https://registry.npmjs.org/side-channel/-/side-
channel-1.0.4.tgz",
          "integrity": "sha512-q5XPytqFEIKHkGdiMIrY10mvLRvnQh42/+GoBlFW3b2LXLE2xxJpZFdm94we0BaoV3Rw
JyGqg5wS7epxTv0Zvw==",
          "requires": {
            "call-bind": "^1.0.0",
            "get-intrinsic": "^1.0.2",
            "object-inspect": "^1.9.0"
          }
        }
      },
    "simple-update-notifier": {
      "version": "1.1.0",
      "resolved": "https://registry.npmjs.org/simple-update-
notifier/-/simple-update-notifier-1.1.0.tgz",
      "integrity": "sha512-VpsrsJSUcJEseSbMHkrsrAVSdvVS5I96Qo1QAQ4FxQ9wXFCB+pjj7FB7/us9+GcgfW4z
iHtYMclJ0PLCzb55mg==",
      "requires": {
        "semver": "~7.0.0"
      },
      "dependencies": {
        "semver": {
          "version": "7.0.0",
          "resolved": "https://registry.npmjs.org/semver/-/semver-
7.0.0.tgz",
          "integrity": "sha512-+GB6zVA9LWh6zovYQLALHwv5rb2PHGlJi3lfiqIHxR0uuwCgefcoJc59v9fv1w8GbStw
xuuqqAjI9NMAOOgq1A=="
        }
      }
    },
    "statuses": {
      "version": "2.0.1",
      "resolved": "https://registry.npmjs.org/statuses/-/statuses-

```

```

2.0.1.tgz",
  "integrity": "sha512-
RwNA9Z/7PrK06rYLIzFMlaF+173iwpzsqRIFgbMLbTcLD6cOao82TaWefPXQvB2fOC4A
juYSEndS7N/mTCbkdQ=="
},
  "stream-transform": {
    "version": "3.2.6",
    "resolved": "https://registry.npmjs.org/stream-transform/-
/stream-transform-3.2.6.tgz",
    "integrity": "sha512-
/pyOvaCQFqYtMrFhmMbnAEVo3SsTx1H39eUVPotYeAgbEUc+rDo7GoP8LbHJgU83mKtz
Je/7Nq/ipaAnUOHgJQ=="
},
  "streamsearch": {
    "version": "1.1.0",
    "resolved": "https://registry.npmjs.org/streamsearch/-
/streamsearch-1.1.0.tgz",
    "integrity": "sha512-
Mcc5wHehp9aXz1ax6bZUyY5afg9u2rv5cqQI3mRrYkGC8rW2hM02jWuwjtL++LS5qinS
yhj2QfLyNsuc+VsExg=="
},
  "string_decoder": {
    "version": "1.1.1",
    "resolved": "https://registry.npmjs.org/string_decoder/-
/string_decoder-1.1.1.tgz",
    "integrity": "sha512-
n/ShnvDi6FHbbVfviro+WojiFzv+s8MPMHBczVePfUpDJLwoLT0ht114YwBCbi8pJAve
EEdnkHyPyTP/mzRfwg==",
    "requires": {
      "safe-buffer": "~5.1.0"
    },
    "dependencies": {
      "safe-buffer": {
        "version": "5.1.2",
        "resolved": "https://registry.npmjs.org/safe-buffer/-
/safe-buffer-5.1.2.tgz",
        "integrity": "sha512-
Gd2UZBJDkXlY7GbJxfsE8/nvKkUEU1G38c1siN6QP6a9PT9MmHB8GnpsscSmMJSoF8LOI
rt8ud/wPtojys4G6+g=="
      }
    }
  },
  "string-width": {
    "version": "4.2.3",
    "resolved": "https://registry.npmjs.org/string-width/-/string-
width-4.2.3.tgz",
    "integrity": "sha512-
wKyQRQpjJ0sIp62ErSZdGsjMJWsap5oRNihHhu6G7JVO/9jIB6UyevL+tXuOqrng8j/c
xKTWYwUwvSTriiZz/g==",
    "requires": {
      "emoji-regex": "^8.0.0",
      "is-fullwidth-code-point": "^3.0.0",
      "strip-ansi": "^6.0.1"
    },
    "dependencies": {
      "strip-ansi": {
        "version": "6.0.1",
        "resolved": "https://registry.npmjs.org/strip-ansi/-/strip-
ansi-6.0.1.tgz",

```

```

    "integrity": "sha512-
Y38VPSHcqkFrCpFnQ9vuSXmquuv5oXOKpGeT6aGrr3o3Gc9AlVa6JBfUSOCnbxGGZF+/
0ooI7KrPuUSztUdU5A==",
    "requires": {
      "ansi-regex": "^5.0.1"
    }
  },
  "strip-bom": {
    "version": "2.0.0",
    "resolved": "https://registry.npmjs.org/strip-bom/-/strip-bom-
2.0.0.tgz",
    "integrity": "sha512-
kwrXly7czplE69n2ajbG65mIo9dqvj+8aBQXOGVxqvwNbsXdFM6Lq37dLAY3mknUwru8
CfcCbfOLL/gMo+fi3g==",
    "requires": {
      "is-utf8": "^0.2.0"
    }
  },
  "supports-color": {
    "version": "7.2.0",
    "resolved": "https://registry.npmjs.org/supports-color/-
/supported-color-7.2.0.tgz",
    "integrity": "sha512-
qpCAvRl9stuOHveKsn7HncJRvv501qIacKzQlO/+Lwxc9+0q2wLyv4Dfvt80/DPn2pqO
BsJdDiogXGR9+Ovwrw==",
    "requires": {
      "has-flag": "^4.0.0"
    }
  },
  "to-regex-range": {
    "version": "5.0.1",
    "resolved": "https://registry.npmjs.org/to-regex-range/-/to-
regex-range-5.0.1.tgz",
    "integrity": "sha512-
65P7iz6X5yEr1cwcgvQxbbIw7Uk3gOy5dIdtZ4rDveLqhrdJP+Li/Hx6tyK0NEb+2GCy
neCMJiGqrADCSNk8sQ==",
    "requires": {
      "is-number": "^7.0.0"
    }
  },
  "toidentifier": {
    "version": "1.0.1",
    "resolved": "https://registry.npmjs.org/toidentifier/-
/toidentifier-1.0.1.tgz",
    "integrity": "sha512-
o5sSPKEkg/DIQNmH43V0/uerLrpzVedkUh8tGNvaeXpfpuwjKenlSox/2O/BTlZUtEe+
JG7s5YhEz608PlAHRA=="
  },
  "touch": {
    "version": "3.1.0",
    "resolved": "https://registry.npmjs.org/touch/-/touch-
3.1.0.tgz",
    "integrity": "sha512-
WBx8Uy5TLtOSRtIq+M03/sKDrXCLHxwDcquSP2c43Le03/9serjQBiztjRz6FkJez9D/
hleyAXTBGLwwZUw91A==",
    "requires": {
      "nopt": "~1.0.10"
    }
  },

```

```

    "type-is": {
      "version": "1.6.18",
      "resolved": "https://registry.npmjs.org/type-is/-/type-is-1.6.18.tgz",
      "integrity": "sha512-TkRKR9sUTxEH8MdfuCSP7VizJyzRNMjj2J2do2Jr3Kym598JVdEksuzPQCnlFPW4ky9Q+iA+ma9BGm06XQBy8g==",
      "requires": {
        "media-typer": "0.3.0",
        "mime-types": "~2.1.24"
      }
    },
    "typedarray": {
      "version": "0.0.6",
      "resolved": "https://registry.npmjs.org/typedarray/-/typedarray-0.0.6.tgz",
      "integrity": "sha512-buVbq49mPjqugA2t94E9HsVrFp6lGyXJXsVJ2jYsY2gR7aQWnFgU7IGbVeb6zUyO4xtcQnLwZMqzZvBg==",
      "integrity": "sha512-1S5In0cWhqpf5/5PQA=="
    },
    "undefsafe": {
      "version": "2.0.5",
      "resolved": "https://registry.npmjs.org/undefsafe/-/undefsafe-2.0.5.tgz",
      "integrity": "sha512-uxUyG7Dxah2LIbmz8Bc0XfYK0wGvIXMkE9H8qUADyJ84U0y9346G+Ay148e+xyT9F74vNF8D9I4T9A==",
      "integrity": "sha512-WxONCrssBM8TSPRqN5EmsjVrsv4A8X12J4ArBiiayv3DyyG3ZlIg6yysuuSYdZsVz3TKcTg2fd//Ujd4CHV1iA=="
    },
    "unpipe": {
      "version": "1.0.0",
      "resolved": "https://registry.npmjs.org/unpipe/-/unpipe-1.0.0.tgz",
      "integrity": "sha512-pjy2bYhSsufwWlKwPc+l3cN7+wuJlK6uz0YdJEOlQDb16jo/YlPi4mb8agUkVC8BF7V8NuzeyPNqRksA3hztKQ=="
    },
    "util-deprecate": {
      "version": "1.0.2",
      "resolved": "https://registry.npmjs.org/util-deprecate/-/util-deprecate-1.0.2.tgz",
      "integrity": "sha512-EPD5gluXyFxJpCrLnCc1nHnq3gOa6DZBocAIIiI2TaSCA7VCJ1UJDMagCzIkXNsUYfD1daK//LTEQ8xiIbrHtcw=="
    },
    "utils-merge": {
      "version": "1.0.1",
      "resolved": "https://registry.npmjs.org/utils-merge/-/utils-merge-1.0.1.tgz",
      "integrity": "sha512-pMZTvIkTld+TFGvDOqodOclx0QWkkgi6Tdoa8gC8ffGAAqz9pzPTZWAYbbsHHoED/zMtkv/VoYTYyShUn81hA=="
    },
    "vary": {
      "version": "1.1.2",
      "resolved": "https://registry.npmjs.org/vary/-/vary-1.1.2.tgz",
      "integrity": "sha512-BNGbWLfd0eUPabhkXUVm0j8uuvREyTh5ovRa/dyow/BqAbZJyC+5fU+IzQOzmAKzYqYRAISoRhdQr3eIZ/PXqg=="
    }
  }

```

```

    },
    "wrap-ansi": {
      "version": "7.0.0",
      "resolved": "https://registry.npmjs.org/wrap-ansi/-/wrap-ansi-7.0.0.tgz",
      "integrity": "sha512-YVGIj2kamLSTxw6NsZjoBxfSwsn0ycdesmc4p+Q21c5zPuZ1pl+NfxVdxPtdHvmNVOQ6XSYG4AUtyt/Fi7D16Q==",
      "requires": {
        "ansi-styles": "^4.0.0",
        "string-width": "^4.1.0",
        "strip-ansi": "^6.0.0"
      }
    },
    "wrapappy": {
      "version": "1.0.2",
      "resolved": "https://registry.npmjs.org/wrapappy/-/wrapappy-1.0.2.tgz",
      "integrity": "sha512-14Sp/DRseor9wL6EvV2+TuQn63dMkPjZ/sp9XkghTEbV9KlPS1xUsZ3u7/IQO4wxteCFB4bgpQPRcR3QCvezPcQ==",
    },
    "xtend": {
      "version": "4.0.2",
      "resolved": "https://registry.npmjs.org/xtend/-/xtend-4.0.2.tgz",
      "integrity": "sha512-1KYU1iAXJXUGAXn9URjiu+MWhyUXHsvfp7mcuYm9dSUKK0/CjtrUwFAXd82/mCWbtLsGjFIad0wIsod4zrTAEQ==",
    },
    "y18n": {
      "version": "5.0.8",
      "resolved": "https://registry.npmjs.org/y18n/-/y18n-5.0.8.tgz",
      "integrity": "sha512-0pfFzegeDWJHJIAmTLRP2DwHjdF5s7jo9tuztdQxAhINCdVS+3nGINqPd00AphqJR/0LhANUS6/+7SCb98YOfA==",
    },
    "yargs": {
      "version": "17.1.1",
      "resolved": "https://registry.npmjs.org/yargs/-/yargs-17.1.1.tgz",
      "integrity": "sha512-c2k48R0PwKIqKhPMWjeiF6y2xY/gPMUlr0sgxqXpbOIohWiLNXWslsootttv7E1e73QPAMQsg5FeySbVcpsPQ==",
      "requires": {
        "cliui": "^7.0.2",
        "escalade": "^3.1.1",
        "get-caller-file": "^2.0.5",
        "require-directory": "^2.1.1",
        "string-width": "^4.2.0",
        "y18n": "^5.0.5",
        "yargs-parser": "^20.2.2"
      }
    },
    "yargs-parser": {
      "version": "20.2.9",
      "resolved": "https://registry.npmjs.org/yargs-parser/-/yargs-parser-20.2.9.tgz",

```

```

    "integrity": "sha512-
y1lnGE1TIV+CT3Zv9t7VK1+Q3hTQoT9a1Qzezhhl6Rp21gJ/IVTW7Z3y9EWXhuUBC2Sh
nf+DX0antecpAwSP8w=="
  }
}
}

```

## 28. package.json

```

{
  "name": "product",
  "version": "1.0.0",
  "description": "",
  "main": "app.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "demo": "node app.js",
    "start": "node app.js",
    "live": "nodemon app.js"
  },
  "author": "Shercosta",
  "license": "ISC",
  "dependencies": {
    "body-parser": "^1.20.1",
    "csv": "^6.3.0",
    "csv-generate": "^4.2.6",
    "csvtojson": "^2.0.10",
    "ejs": "^3.1.8",
    "express": "^4.18.2",
    "formidable": "^2.1.1",
    "json-to-csv-export": "^2.1.1",
    "json2csv": "^6.0.0-alpha.2",
    "localtunnel": "^2.0.2",
    "multer": "^1.4.5-lts.1",
    "nodemon": "^2.0.22",
    "papaparse": "^5.4.1",
    "python-shell": "^5.0.0"
  }
}

```

## 29. setup.py

```

import nltk

nltk.download("punkt")
nltk.download("averaged_perceptron_tagger")
nltk.download("wordnet")
nltk.download("omw-1.4")
nltk.download("stopwords")

```

## 30. slang.dic

```

{
  "1pun": "satupun",
  "7an": "tujian",

```

"Dr.": "dokter",  
 "dr.": "dokter",  
 "drg.": "dokter gigi",  
 "Jkt": "Jakarta",  
 "Jkw": "jokowi",  
 "Napza": "narkoba psikotropika dan zat adiktif",  
 "Nasihat": "nasehat",  
 "ababil": "abg labil",  
 "abis": "habis",  
 "acc": "accord",  
 "accord": "sesuai",  
 "ad": "ada",  
 "adl": "adalah",  
 "adlah": "adalah",  
 "adlh": "adalah",  
 "administ": "administrasi",  
 "adoh": "aduh",  
 "afaik": "as far as i know",  
 "agma": "agama",  
 "aha": "tertawa",  
 "ahaha": "haha",  
 "ahiok": "ahok",  
 "mehong": "mahal",  
 "ahoax": "ahok",  
 "ahokncc": "ahok",  
 "aing": "saya",  
 "aj": "saja",  
 "aja": "saja",  
 "ajak2": "ajak-ajak",  
 "ajep-ajep": "dunia gemerlap",  
 "ajj": "saja",  
 "ak": "aku",  
 "aka": "dikenal juga sebagai",  
 "akherat": "akhirat",  
 "akhirx": "akhirnya",  
 "akika": "aku",  
 "akko": "aku",  
 "akkoh": "aku",  
 "akku": "aku",  
 "akn": "akan",  
 "aktifis2": "aktivis-aktivis",  
 "aktivi": "aktivis",  
 "aktivis2": "aktivis-aktivis",  
 "akun2": "akun-akun",  
 "akuwh": "aku",  
 "akyu": "aku",  
 "alay": "norak",  
 "aleg": "caleg",  
 "alih2": "alih-alih",  
 "aljasa": "asal jadi saja",  
 "almaidahyg": "almaidah",  
 "alow": "halo",  
 "ama": "sama",  
 "ambilin": "ambilkan",  
 "ambl": "ambil",  
 "amerik": "amarika",  
 "anak2": "anak-anak",  
 "analisis": "analisis",  
 "ancur": "hancur",



```

"angis": "nangis",
"anjay": "anjing",
"anjir": "anjing",
"anjrit": "anjing",
"ank": "anak",
"anter": "antar",
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"bangkotan": "tua",
"banpol": "bantuan polisi",
"banpres": "bantuan presiden",
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"bansarkas": "bantuan sarana kesehatan",  
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 "bdg": "bandung",  
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 "bejibun": "banyak",  
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 "benarjujur": "jujur",  
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 "beti": "beda tipis",  
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 "bkl": "akan",  
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 "blas": "balas",  
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"bln": "bulan",
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"bncl": "benci",
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"bntr": "sebentar",
"bnyk": "banyak",
"bodor": "lucu",
"bohay": "badan aduhai",
"bokap": "ayah",
"bokep": "video porno",
"boker": "buang air besar",
"bokin": "pacar",
"bokis": "bohong",
"bole": "boleh",
"boljug": "boleh juga",
"bolot": "bodoh",
"bonek": "bocah nekat",
"bonyok": "ayah ibu",
"bopi": "badan olahraga profesional indonesia",
"boyeh": "boleh",
"bpk": "bapak",
"br": "baru",
"brb": "segera kembali",
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"brstu": "bersatu",
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"bsk": "besok",
"bsr": "besar",
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"btol": "botol",
"btw": "ngomong-ngomong",
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"buber": "buka bersama",
"bubu": "tidur",
"bujubune": "luar biasa",
"bumil": "ibu hamil",
"bunuh2an": "bunuh-bunuhan",
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"cabut": "pergi",
"cidas": "keren",
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"cakap": "berbicara",
"calo": "makelar",
"cama-cama": "sama-sama",
"can": "belum",
"cangcut": "celana dalam",
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"caper": "cari perhatian",
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"caur": "jelek",
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"cb": "coba",
"cc": "carbon copy",
"ce": "cewek",
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"cekal": "cegah tangkal",
"cekidot": "coba lihat",
"cemen": "penakut",
"cemplungin": "cemplungkan",
"cengengesan": "tertawa",
"cepat2": "cepat cepat",
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"ciyh": "sih",
"cjr": "coboy junior",
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"ckepp": "cakep",
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"clbk": "cinta lama bersemi kembali",
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"cmiiw": "correct me if i'm wrong",
"cmpr": "campur",
"cmpur": "campur",
"cnenk": "senang",
"cong": "banci",
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"conlok": "cinta lokasi",

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"cos": "cause",
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"cppe": "capek",
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"crny": "caranya",
"cth": "contoh",
"cucok": "cocok",
"cuek": "tidak acuh",
"cuex": "cuek",
"cuman": "Cuma",
"cumi": "Cuma miscall",
"cungkring": "kurus tinggi",
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"cupu": "culun",
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"cwok": "cowok",
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"cz": "karena",
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"dech": "deh",
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"deket": "dekat",
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"dengerin": "dengarkan",
"deyh": "deh",
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"dgr": "dengar",
"dh": "sudah",
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"die": "dia",
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"digosipin": "digosipkan",
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"dimaafin": "dimaafkan",
"dimana2": "dimana-mana",
"dimintak": "diminta",
"dimna": "dimana",
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"dll": "dan lain-lain",
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"dlu": "dulu",
"dmaksud": "dimaksud",
"dmn": "dimana",
"dn": "dan",
"dngn": "dengan",
"doang": "saja",
"dodol": "bodoh",
"doi": "dia",
"doku": "uang",
"donat": "donut",
"doughnat": "donut",
"don juan": "playboy",
"dongok": "bodoh",
"dongs": "dong",
"donk": "dong",
"donlot": "unduh",
"dpr": "dewan perwakilan rakyat",
"dprd": "dewan perwakilan rakyat daerah",
"dpt": "dapat",
"dr": "dari",
"dri": "dari",
"drmana": "darimana",
"drmn": "darimana",
"drpd": "daripada",
"drttd": "dari tadi",
"dsb": "dan sebagainya",
"dst": "dan seterusnya",
"dstu": "disitu",
"dtg": "datang",
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"duh": "aduh",
"duit": "uang",
"dulu": "dahulu",
"dungu": "bodoh",
"duren": "durian",
"dy": "dia",
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"emg": "memang",
"emng": "memang",
"emte": "makan teman",

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"ex": "mantan",
"ext": "extension",
"fahami": "pahami",
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"fakta2": "fakta-fakta",
"faktakta": "fakta",
"fax": "facsimile",
"fb": "facebook",
"fdsi": "forum diskusi suporter indonesia",
"fifo": "first in first out",
"finek": "finansial ekonomi",
"fisip": "fakultas ilmu sosial dan ilmu politik",
"fitnag": "fitnah",
"folbek": "follow back",
"fpi": "front pembela islam",
"fwd": "diterukan",
"fyi": "sebagai informasi",
"g": "tidak",
"ga": "tidak",
"gaada": "tidak ada uang",
"gabisa": "tidak bisa",
"gag": "tidak",
"gahar": "sangar",
"gaje": "tidak jelas",
"gak": "tidak",
"gak papa": "tidak apa-apa",
"gamau": "tidak mau",
"gan": "juragan",
"gantengbs": "ganteng",
"gantengsaya": "ganteng",
"gapapa": "tidak apa-apa",
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"gatau": "tidak tahu",
"gatek": "gagap teknologi",
"gatot": "gagal total",
"gawe": "kerja",
"gax": "tidak",
"gbs": "tidak bisa",
"gd": "gusdur",
"gda": "tidak ada uang",
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"negara": "gara-gara",
"geje": "tidak jelas",
"gelo": "gila",
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"gn": "begini",
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"glob": "bodoh",
"gokil": "gila",
"golongan2": "golongan-golongan",
"golput": "golongan putih",
"gombal": "suka merayu",
"good": "bagus",
"governor": "gubernur",
"gowes": "mengayuh sepeda",
"gp1": "tidak pakai lama",
"gpny": "tidak punya",
"gp": "tidak apa-apa",
"gr": "gede rasa",
"greton": "gratis",
"greton": "gratisan",
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"gtau": "tidak tahu",
"gtw": "tidak tahu",
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"gu": "gubernur",
"gue": "saya",
"guna": "menggunakan",
"guoblok": "glob",
"guys": "teman-teman",
"gw": "saya",
"gws": "cepat sembuh",
"ha": "tertawa",
"habis2an": "habis-habisan",
"haghaghag": "tertawa",
"haha": "tertawa",
"hak2": "hak hak",
"hakhak": "tertawa",
"hallo": "halo",
"ham": "hak asasi manusia",
"handak": "bahan peledak",
"hankam": "pertahanan dan keamanan",
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"happy": "bahagia",
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"hehe": "he",
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"heter": "pembenci",
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"hi": "hai",
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"hlng": "hilang",
"hny": "hanya",
"hnya": "hanya",
"hoax": "isu bohong",
"hot2nya": "hot-hotnya",
"houm": "rumah",
"hr": "hari",
"hrs": "harus",
"hrus": "harus",
"hubad": "hubungan angkatan darat",
"hubdar": "perhubungan darat",
"hubla": "perhubungan laut",
"huff": "mengeluh",
"huft": "mengeluh",
"hum": "rumah",
"humas": "hubungan masyarakat",
"humoris": "lucu",
"humz": "rumah",
"hurts": "pedih",
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"icecreamsandwich": "ice cream sandwich",
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"idk": "saya tidak tahu",
"idup": "hidup",
"ikon": "lambang",
"ilang": "hilang",
"ilfeel": "tidak suka",
"ilfil": "tidak suka",
"imba": "jago sekali",
"imho": "in my humble opinion",
"imoet": "imut",
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"indon": "Indonesia",
"info": "informasi",
"insom": "insomnia",
"ipb": "institut pertanian bogor",
"irit": "hemat",
"isengin": "bercanda",
"ista": "nista",
"istaa": "nista",
"isu2": "isu-isu",
"item": "hitam",
"itj": "Indonesia tanpa jil",
"ito": "itu",
"itu2": "itu-itulah",
"itung": "hitung",
"itungan": "hitungan",
"iy": "iya",
"iyala": "iya lah",
"iye": "iya",
"iyo": "iya",
"ja": "saja",
"jabar": "jawa barat",
"jablay": "jarang dibelai",
"jadiin": "jadikan",

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"jadul": "jaman dulu",
"jaim": "jaga image",
"jan": "jangan",
"jancuk": "anjing",
"janjinyaa": "janji",
"jargon2": "jargon jargon",
"jatim": "jawa timur",
"jatohin": "menjatuhkan",
"jawapan": "jawaban",
"jayus": "tidak lucu",
"jd": "jadi",
"jdi": "jadi",
"jdikan": "jadikan",
"je": "saja",
"jelas2": "jelas-jelas",
"jem": "jam",
"jentelmen": "berani",
"jg": "juga",
"jga": "juga",
"jgk": "juga",
"jgn": "jangan",
"jgnkan": "jangankan",
"ji2k": "jijik",
"jijay": "jijik",
"jil": "jaringan islam liberal",
"jir": "anjing",
"jjk": "jijik",
"jk": "jika",
"jkt": "jakarta",
"jln": "jalan",
"jng": "jangan",
"jnj": "janji",
"joget2": "joget-joget",
"jomblo": "tidak punya pacar",
"jth": "jatuh",
"jual2": "jual-jual",
"jubir": "juru bicara",
"jurdil": "jujur adil",
"jutek": "galak",
"jwb": "jawab",
"k": "ke",
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"kab": "kabupaten",
"kabag": "kepala bagian",
"kabor": "kabur",
"kacian": "kasihan",
"kacrut": "kacau",
"kadang2": "kadang kadang",
"kadit": "kepala direktorat",
"kadiv": "kepala divisi",
"kaga": "tidak",
"kagak": "tidak",
"kaka": "kakak",
"kalo": "kalau",
"kaltim": "kalimantan timur",
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"kamtib": "keamanan dan ketertiban",
"kamtibmas": "keamanan dan ketertiban masyarakat",
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"kamuwh": "kamu",
"kamyu": "kamu",
"kan": "akan",
"kanwil": "kantor wilayah",
"kapolri": "Kepala Polisi Republik Indonesia",
"kapt": "kapten",
"karna": "karena",
"kasubbag": "kepala subbagian",
"kasubbid": "kepala subbidang",
"kata2": "kata-kata",
"katrok": "kampungan",
"kau": "kamu",
"kawan2": "kawan-kawan",
"kayanya": "kayaknya",
"kbar": "kabar",
"kbr": "kabar",
"kcian": "kasihan",
"kdng": "kadang",
"kdu": "harus",
"ke": "kah",
"kebranian": "keberanian",
"keburu": "terlanjur",
"kec": "kecamatan",
"kedubes": "kedutaan besar",
"kejar2": "kejar-kejar",
"kejurnas": "kejuaraan nasional",
"kek": "seperti",
"kekeuh": "keras kepala",
"keknya": "kayanya",
"kel": "kelurahan",
"keliatan": "kelihatan",
"kemaren": "kemarin",
"kemenag": "kementrian agama",
"kemenkominfo": "kementrian komunikasi dan informatika",
"kemrin": "kemarin",
"keneh": "masih",
"kentot": "senggama",
"kepengen": "mau",
"kepikiran": "terpikirkan",
"kepingin": "mau",
"kepo": "mau tahu urusan orang",
"kepsek": "kepala sekolah",
"kere": "tidak punya uang",
"kesbang": "kesatuan bangsa",
"kesian": "kasihan",
"kesihatan": "kesehatan",
"kesra": "kesejahteraan rakyat",
"ketauan": "ketahuan",
"ketrima": "diterima",
"ketum": "ketua umum",
"keukeuh": "keras kepala",
"kgiatan": "kegiatan",
"khan": "kan",
"kibul": "bohong",
"kibus": "kaki busuk",
"kimpoi": "kawin",
"kk": "kakak",
"kl": "kalau",
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"klw": "kalau",
"klwrga": "keluarga",
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"kmari": "kemari",
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"kmrm": "kemeramen",
"kmrn": "kemarin",
"kn": "kan",
"knal": "kenal",
"kne": "terlibat",
"knl": "kenal",
"knpp": "kenapa",
"knppa": "kenapa",
"koar": "teriak",
"kodya": "kota madya",
"kog": "kok",
"komdis": "komisi disiplin",
"kompi": "komputer",
"komsov": "komunis soviet",
"komtiong": "komunis Tiongkok",
"komun": "komunitas",
"kongkow": "kumpul bareng teman-teman",
"konjen": "konsulat jenderal",
"konpers": "konferensi pers",
"kopdar": "kopi darat",
"koq": "kok",
"korup": "korupsi",
"kowe": "kamu",
"kpai": "komisi perlindungan anak indonesia",
"kpdp": "kepada",
"kpdp": "komisi penyiaran indonesia daerah",
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"kpdp": "garing",
"kpdp": "kirip",
"kpdp": "kirim",
"kpdp": "karena",
"ksadaran": "kesadaran",
"kt": "kita",
"ktauan": "ketahuan",
"ktipu": "tipu",
"ktk": "ketika",
"ktmu": "ketemu",
"ktny": "katanya",
"ktpp": "kartu tanda penduduk",
"ktpp": "kantor",
"ktdu": "harus",
"ktpper": "kurang pergaulan",

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"kuq": "kok",
"kurng": "kurang",
"kw": "imitasi",
"kwn": "kawan",
"ky": "seperti",
"kyk": "seperti",
"kykny": "kayanya",
"la": "lah",
"laka": "kecelakaan",
"laki2": "laki-laki",
"lam": "salam",
"lambreta": "lambat",
"lamp": "lampiran",
"langi": "langit",
"lansia": "lanjut usia",
"lanud": "landasan udara",
"lapas": "lembaga pemasyarakatan",
"larang2": "larang-larang",
"latgab": "latihan gabungan",
"lawyer2": "lawyer lawyer",
"lbh": "lebih",
"lbur": "libur",
"lebay": "berlebihan",
"leh": "boleh",
"lekong": "laki-laki",
"lelet": "lambat",
"lemot": "lemah otak",
"lesbia": "lesbian",
"less": "kurang",
"lg": "lagi",
"lgi": "lagi",
"lgkp": "lengkap",
"lgsg": "langsung",
"lha": "lah",
"lht": "lihat",
"liat": "lihat",
"light": "terang",
"linmas": "perlindungan masyarakat",
"litbang": "penelitian dan pengembangan",
"liwat": "lewat",
"lknt": "laknat",
"lmyan": "lumayan",
"lmyn": "lumayan",
"lngkp": "lengkap",
"lo": "kamu",
"loch": "loh",
"loe": "kamu",
"lol": "tertawa",
"lola": "lambat berfikir",
"lom": "belum",
"loup": "cinta",
"loupz": "cinta",
"low": "kalau",
"lowh": "kamu",
"lp": "lupa",
"lsm": "lembaga swadaya masyarakat",
"lu": "kamu",
"luber": "langsung, umum, bebas, dan rahasia",
"luchu": "lucu",

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"luchuw": "lucu",
"luff": "cinta",
"lum": "belum",
"luph": "cinta",
"luthu": "lucu",
"luv": "love",
"lw": "kamu",
"lwn": "lawan",
"lwt": "lewat",
"lyf": "live",
"ma": "sama",
"maacih": "terima kasih",
"maaciw": "terima kasih",
"mabal": "bolos",
"mabes": "markas besar",
"macem": "macam",
"macem-macem": "macam-macam",
"macet2an": "macet-macetan",
"macih": "masih",
"madesu": "masa depan suram",
"maem": "makan",
"maen": "main",
"magabut": "makan gaji buta",
"mahatma": "maju sehat bersama",
"maho": "homo",
"majority": "mayoritas",
"mak": "ibu",
"mak jang": "kaget",
"makasih": "terima kasih",
"maksain": "memaksa",
"malah": "bahkan",
"malem": "malam",
"malu2in": "memalukan",
"mam": "makan",
"mamz": "makan",
"mana2": "mana-mana",
"maneh": "kamu",
"manen": "panen",
"manggil": "panggil",
"manies": "manis",
"maniez": "manis",
"mantabss bagus": "",
"mantep": "mantap",
"mao": "mau",
"maren2": "kemarin-kemarin",
"markus": "makelar kasus",
"masama": "sama - sama",
"masing2": "masing-masing",
"masukin": "masukkan",
"masy": "masyarakat",
"mati2": "mati-mati",
"maybe": "mungkin",
"mb": "mbak",
"mba": "mbak",
"mbabibuta": "ceroboh",
"mbahas": "membahas",
"mbaur": "baur",
"mbelain": "belain",
"mbual": "membual",

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"mcm": "macam",
"mdh": "mudah",
"mdh2an": "mudah-mudahan",
"medsos": "media sosial",
"melayakni": "melayani",
"melu": "ikut",
"mencarut2": "mencarut",
"mending": "lebih baik",
"mendpt": "mendapat",
"menjdi": "menjadi",
"menklarifikasi": "mengklarifikasi",
"menolak": "tolak",
"menpora": "menteri pemuda dan olahraga",
"menristek": "menteri riset, teknologi dan pendidikan",
"mensos": "menteri sosial",
"mepet": "dekat sekali",
"mesjid": "masjid",
"met": "selamat",
"metro": "metropolitan",
"mga": "moga",
"mgkin": "mungkin",
"mgkn": "mungkin",
"mgu": "minggu",
"mhn": "mohon",
"migas": "minyak dan gas bumi",
"miker": "minuman keras",
"mikol": "minuman beralkohol",
"milis": "mailing list",
"miras": "minuman keras",
"miumi": "majelis intelektual dan ulama muda indonesia",
"mjadikan": "menjadikan",
"mjd": "menjadi",
"mkzd": "maksud",
"mlah": "malah",
"mlalui": "melalui",
"mlm": "malam",
"mls": "malas",
"mmbuat": "membuat",
"mmg": "memang",
"mmng": "memang",
"mndukung": "mendukung",
"mngajarkan": "mengajarkan",
"mngkn": "mungkin",
"mninggal": "meninggal",
"mnipu": "tipu",
"mnjd": "menjadi",
"mnolak": "tolak",
"mnrtmu": "menurutmu",
"mnt": "minta",
"mnyumbang": "menyumbang",
"mo": "mau",
"modar": "mati",
"moga": "semoga",
"moge": "motor gede",
"mokad": "mati",
"mokat": "mati",
"moso": "masa",
"mosok": "masa",
"most": "paling",

```

"mpe": "sampai",  
 "mpr": "majelis permusyawaratan rakyat",  
 "mrk": "mereka",  
 "msh": "masih",  
 "msk": "masuk",  
 "mskpn": "meskipun",  
 "mslh": "masalah",  
 "msng2": "masing-masing",  
 "msuh": "musuh",  
 "mt": "makan teman",  
 "muahal": "mahal",  
 "mubes": "musyawarah besar",  
 "mui": "majelis ulama indonesia",  
 "muker": "musyawarah kerja",  
 "mulu": "melulu",  
 "mumet": "pusing",  
 "mumpung": "selagi",  
 "muna": "munafik",  
 "munas": "musyawarah nasional",  
 "munaslub": "musyawarah nasional luar biasa",  
 "munfik": "munafik",  
 "muntaber": "muntah dan berak",  
 "musda": "musyawarah daerah",  
 "musti": "mesti",  
 "muter2": "muter-muter",  
 "muup": "maaf",  
 "muupz": "maaf",  
 "muuv": "maaf",  
 "mw": "now watching",  
 "mz": "mas",  
 "n": "dan",  
 "na": "nya",  
 "naas": "nahas",  
 "nak": "hendak",  
 "nal": "kenal",  
 "nan": "dan",  
 "nanam": "menanam",  
 "nangis": "menangis",  
 "nanya": "bertanya",  
 "naon": "apa",  
 "napa": "kenapa",  
 "napi": "narapidana",  
 "napol": "narapidana politik",  
 "napza": "narkotika, alkohol, psikotropika, dan zat adiktif",  
 "naq": "anak",  
 "narkoba": "narkotika, psikotropika, dan obat terlarang",  
 "narsis": "bangga pada diri sendiri",  
 "nasgor": "nasi goreng",  
 "nax": "anak",  
 "nda": "tidak",  
 "ndak": "tidak",  
 "ndiri": "sendiri",  
 "ndut": "gendut",  
 "ne": "ini",  
 "negri": "negeri",  
 "nekolim": "neokolonialisme",  
 "nekolin": "neokolonialisme",  
 "nelfon": "menelepon",  
 "nembak": "menyatakan cinta",



"next": "lanjut",  
 "ngabis2in": "menghabiskan",  
 "ngabuburit": "menunggu berbuka puasa",  
 "ngakak": "tertawa",  
 "ngaku": "mengaku",  
 "ngambek": "marah",  
 "ngambil": "mengambil",  
 "ngampus": "pergi ke kampus",  
 "ngamuk2": "ngamuk-ngamuk",  
 "nganggur": "tidak punya pekerjaan",  
 "ngantri": "mengantri",  
 "ngapah": "kenapa",  
 "ngapain": "sedang apa",  
 "ngaret": "terlambat",  
 "ngaruh": "berpengaruh",  
 "ngasih": "memberikan",  
 "ngawur": "berbicara sembarangan",  
 "ngebandel": "berbuat bandel",  
 "ngebully": "intimidasi",  
 "ngeceng": "kumpul bareng-bareng",  
 "ngegosip": "bergosip",  
 "ngeh": "sadar",  
 "ngehe": "kesal",  
 "ngeklaim": "mengklaim",  
 "ngekos": "tinggal di kos",  
 "ngeksis": "menjadi eksis",  
 "ngelamar": "melamar",  
 "ngeles": "berkilah",  
 "ngeliat": "melihat",  
 "ngelidur": "menggigau",  
 "ngemeng": "bicara terus-terusan",  
 "ngentot": "senggama",  
 "ngentotin": "senggama",  
 "ngerampok": "merampok",  
 "ngeri": "seram",  
 "ngerti": "mengerti",  
 "ngga": "tidak",  
 "nggak": "tidak",  
 "ngibul": "berbohong",  
 "ngikut": "ikut",  
 "ngiler": "mau",  
 "nginep": "menginap",  
 "ngiri": "iri",  
 "ngisi": "mengisi",  
 "ngisiin": "mengisikan",  
 "ngmg": "bicara",  
 "ngmng": "bicara",  
 "ngn": "dengan",  
 "ngo": "non governmental organization",  
 "ngocol": "lucu",  
 "ngomong": "bicara",  
 "ngomongin": "membicarakan",  
 "ngubek2": "mencari-cari",  
 "ngumpet": "sembunyi",  
 "ngumpul": "berkumpul",  
 "ngurus": "mengurus",  
 "ngusir2": "usir-usir",  
 "nh": "nih",  
 "ni": "ini",

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"nice": "bagus",
"nie": "ini",
"niech": "nih",
"nih": "ini",
"nikahkah": "nikahkan",
"nimbrung": "ikut serta",
"nipu": "tipu",
"nitizen": "netizen",
"niyh": "nih",
"nk": "ingin",
"nkah": "nikah",
"nmenarik": "menarik",
"nmr": "nomor",
"nnt": "nanti",
"nnti": "nanti",
"nntn": "nonton",
"no": "nomor",
"nobar": "nonton bareng",
"nongkrong": "kumpul-kumpul",
"np": "now playing",
"nrp": "narapidana",
"ntap": "mantap",
"ntar": "sebentar",
"ntn": "nonton",
"nu": "nahdatul ulama",
"nuhun": "terima kasih",
"numbuk": "bertumpuk",
"nunggu": "menunggu",
"nutupin": "menutupi",
"ny": "nya",
"nyaingin": "saing",
"nyalahin": "salah",
"nyampah": "membuat sampah",
"nyampyr": "nyampur",
"nyang": "yang",
"nyari": "mencari",
"nyariin": "mencari",
"nyasar": "tersesat",
"nyekar": "menyekar",
"nyela": "cela",
"nyembah": "sembah",
"nyemot": "ambil",
"nyerang": "serang",
"nyiapin": "mempersiapkan",
"nyicil": "mencicil",
"nyiram": "menyiram",
"nympr": "nyampur",
"nyoblos": "mencoblos",
"nyok": "ayo",
"nyokap": "ibu",
"o": "oleh",
"o/": "oleh",
"odmk": "orang dengan masalah kejiwaan",
"ogah": "tidak mau",
"oia": "oh iya",
"ok": "ok",
"okt": "oktober",
"ol": "online",
"omdo": "omong doang",

```

```

"omg": "oh my god",
"omong2": "ngomong-ngomong",
"ongkir": "ongkos kirim",
"oon": "bodoh",
"oot": "out of topic",
"orange": "oranye",
"org": "orang",
"org2": "orang-orang",
"orglaen": "orang lain",
"orkes": "olahraga dan kesehatan",
"ortu": "orang tua",
"ospek": "orientasi studi dan pengenalan kampus",
"otda": "otonomi daerah",
"otre": "ok",
"otw": "on the way, sedang di jalan",
"our": "kami",
"p": "per",
"p.s": "pesan",
"p0rn": "porno",
"pa": "apa",
"pacal": "pacar",
"pahe": "paket hemat",
"pake": "pakai",
"pakek": "pakai",
"pala": "kepala",
"panja": "panitia kerja",
"pansus": "panitia khusus",
"pantura": "pantai utara",
"paranoid": "takut",
"parno": "takut",
"parpol": "partai politik",
"parte": "partai",
"pas2an": "pas-pasan",
"pasutri": "pasangan suami istri",
"patas": "cepat dan terbatas",
"pd": "pada",
"pdhl": "padahal",
"pdip": "partai demokrasi Indonesia perjuangan",
"pdkji": "perhimpunan dokter spesialis kedokteran jiwa
indonesia",
"pdt": "padat",
"pecahan2": "pecahan-pecahan",
"pede": "percaya diri",
"pelanggarab": "pelanggaran",
"pelatda": "pemusatan latihan daerah",
"pelatnas": "pemusatan latihan nasional",
"pelcehn": "pelecehan",
"pembokat": "pembantu",
"pemda": "pemerintah daerah",
"pemilu": "pemilihan umum",
"pemko": "pemerintah kota",
"pemkot": "pemerintah kota",
"pemprov": "pemerintah provinsi",
"pemred": "pemimpin redaksi",
"pendukung2": "pendukung-pendukung",
"penertiban": "tertib",
"pengen": "ingin",
"penjas": "pendidikan jasmani",
"penmas": "pendidikan masyarakat",

```

"perda": "peraturan daerah",  
 "perek": "wanita tuna susila",  
 "peremp": "perempuan",  
 "pergub": "peraturan gubernur",  
 "perhatiin": "perhatikan",  
 "pertamax": "pertama",  
 "pesenan": "pesanan",  
 "pesenin": "pesankan",  
 "pgang": "pegang",  
 "pgi": "pergi",  
 "pi": "tapi",  
 "pihak2": "pihak pihak",  
 "pijetin": "pijitkan",  
 "pilgub": "pemilihan gubernur",  
 "pilkada": "pemilihan kepala daerah",  
 "pimpro": "pemimpin proyek",  
 "pinter2": "pintar-pintar",  
 "pisan": "sangat",  
 "pisgor": "pisang goreng",  
 "pk": "penjahat kelamin",  
 "pke": "pakai",  
 "pket": "paket",  
 "pkr": "pakar",  
 "pks": "partai keadilan sejahtera",  
 "plg": "paling",  
 "plh": "pilih",  
 "pls": "tolong",  
 "pm": "private message",  
 "pmhaman": "pemahaman",  
 "pmrnth": "pemerintah",  
 "pndkung": "pendukung",  
 "pndukung": "pendukung",  
 "pnjilat": "penjilat",  
 "pns": "pegawai negeri sipil",  
 "pny": "punya",  
 "poin2": "poin-poin",  
 "polantas": "polisi lalu lintas",  
 "polda": "kepolisian daerah",  
 "polres": "kepolisian resor",  
 "polwan": "polisi wanita",  
 "pon": "juga",  
 "ponpes": "pondok pesantren",  
 "ponsel": "telepon seluler",  
 "poster2": "poster-poster",  
 "pp": "pulang pergi",  
 "ppa": "apa",  
 "presh": "segar",  
 "prg": "pergi",  
 "prikitiw": "cie",  
 "priksa": "periksa",  
 "prilaku": "perilaku",  
 "prnh": "pernah",  
 "pro": "profesional",  
 "problem": "masalah",  
 "prototype": "contoh",  
 "prov": "provinsi",  
 "psen": "pesan",  
 "psn": "pesan",  
 "psr": "pasar",

```

"pst": "pasti",
"psti": "pasti",
"pswt": "pesawat",
"ptemuan": "pertemuan",
"puanas": "panas",
"pulgar": "kasar",
"puskesmas2": "puskesmas-puskesmas",
"puyeng": "pusing",
"pw": "posisi nyaman",
"qmo": "kamu",
"qmu": "kamu",
"qt": "kita",
"rakor": "rapat koordinasi",
"rame": "ramai",
"rang": "orang",
"ranmor": "kendaraan bermotor",
"raskin": "rakyat miskin",
"rata2": "rata-rata",
"re": "reply",
"red": "redaksi",
"ref": "referensi",
"reg": "register",
"rehab": "rehabilitasi",
"rejeky": "rezeki",
"rekan2": "rekan-rekan",
"reklamuk": "reklamasi",
"rempah2": "rempah-rempah",
"rempong": "sulit",
"renstra": "rencana strategis",
"repp": "balas",
"reskrim": "reserse kriminal",
"restik": "reserse narkotika",
"rhs": "rahasia",
"rights": "benar",
"rja": "raja",
"rkyt": "rakyat",
"rmby": "rambut",
"rmh": "rumah",
"rofl": "rolling on the floor laughing",
"ru": "baru",
"rubahnn": "rubah",
"rudal": "peluru kendali",
"ruko": "rumah toko",
"rusun": "rumah susun",
"rusunawa": "rumah susun sewa",
"rutan": "rumah tahanan",
"ruu": "rancangan undang-undang",
"ruz": "terus",
"rwt": "rawat",
"s4": "sempat",
"sadaar": "sadar",
"sah2": "sah-sah",
"saia": "saya",
"saiank": "sayang",
"salting": "salah tingkah",
"saltum": "salah kostum",
"sampe": "sampai",
"sampeyan": "anda",
"samsek": "sama sekali",

```

"sapa": "siapa",  
 "sapose": "siapa",  
 "satkorlak": "satuan koordinator pelaksana",  
 "satpam": "satuan pengamanan",  
 "say": "sayang",  
 "sayan": "sayang",  
 "sbaliknya": "sebaliknya",  
 "sbb": "sebagai berikut",  
 "sbg": "sebagai",  
 "sbgn": "sebagian",  
 "sbh": "sebuah",  
 "sblm": "sebelum",  
 "sbnr": "sebenar",  
 "sbnrny": "sebenarnya",  
 "sbntr": "sebentar",  
 "scara": "secara",  
 "scr": "secara",  
 "sdg": "sedang",  
 "sdgkn": "sedangkan",  
 "sdh": "sudah",  
 "sdkt": "sedikit",  
 "sdngkn": "sedangkan",  
 "se7": "setuju",  
 "seabrek": "banyak",  
 "sebelas dua belas": "mirip",  
 "sebelum": "sebelum",  
 "sebgmn": "sebagaimana",  
 "sebuk": "sibuk",  
 "sekjen": "sekretaris jenderal",  
 "selaen": "selain",  
 "selmt": "selamat",  
 "semau": "asal",  
 "sembako": "sembilan bahan pokok",  
 "sempak": "celana dalam",  
 "sempet": "sempat",  
 "sempet2nya": "sempat-sempatnya",  
 "sendratari": "seni drama tari",  
 "seorg": "seorang",  
 "sept": "september",  
 "serasiii": "serasi",  
 "sertijab": "serah terima jabatan",  
 "sesok": "besok",  
 "seting": "akting",  
 "setting": "atur",  
 "sgl": "segala",  
 "sgrc": "support group and resource center",  
 "sgt": "sangat",  
 "sgtunya": "segitunya",  
 "shg": "sehingga",  
 "shrsnya": "seharusnya",  
 "siap2": "siap-siap",  
 "sidak": "inspeksi mendadak",  
 "siech": "sih",  
 "sieyh": "sih",  
 "sigh": "sih",  
 "sik": "sih",  
 "sikon": "situasi dan kondisi",  
 "simiskin": "miskin",  
 "simpedes": "simpanan pedesaan",

```

"sinetron": "sinema elektronik",
"sip": "ok",
"siramin": "siramkan",
"sis": "kakak perempuan",
"sj": "saja",
"sjk": "sejak",
"skali": "sekali",
"skalian": "sekalian",
"skl": "sekali",
"sklh": "sekolah",
"skrg": "sekarang",
"skt": "sakit",
"skul": "sekolah",
"slalu": "selalu",
"slama": "selama",
"slesai": "selesai",
"slh": "salah",
"sll": "selalu",
"sllu": "selalu",
"slm": "salam",
"slma": "selama",
"slmt": "selamat",
"slsai": "selesai",
"slt": "sulit",
"sm": "sama",
"sma": "sama",
"smg": "semoga",
"smkn": "semakin",
"smpt": "sempat",
"smua": "semua",
"smw": "semua",
"smwny": "semuanya",
"sndiri": "sendiri",
"sng": "senang",
"sni": "sini",
"soft": "halus",
"sohib": "teman",
"sokong": "dukung",
"soljum": "sholat jumat",
"solve": "solusi",
"somse": "sombong sekali",
"songong": "sombong",
"sorry": "maaf",
"sory": "maaf",
"sosbud": "sosial-budaya",
"sosek": "sosial-ekonomi",
"sospol": "sosial-politik",
"sotoy": "sok tahu",
"sowry": "maaf",
"spa": "siapa",
"spd": "sepeda",
"sppa": "siapa",
"sprti": "seperti",
"spt": "seperti",
"spy": "supaya",
"srt": "surat",
"srtfkt": "sertifikat",
"stelah": "setelah",
"stiap": "setiap",

```

```

"still": "masih",
"stlh": "setelah",
"stop": "henti",
"subbag": "subbagian",
"suk": "masuk",
"sumbangin": "sumbangkan",
"sumpek": "sempit",
"sy": "saya",
"sya": "saya",
"syg": "sayang",
"syp": "siapa",
"t4": "tempat",
"tabanas": "tabungan pembangunan nasional",
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"tai": "kotoran",
"taik": "tahi",
"tajir": "kaya",
"tak": "tidak",
"tar": "nanti",
"tarik2": "tarik-tarik",
"tau": "tahu",
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"tawh": "tahu",
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"td": "tadi",
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"telat": "terlambat",
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"thdp": "terhadap",
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"tilep": "tilap",

```



```

"tioghoa": "tionghoa",
"tipi": "TV",
"tipiwan": "TvOne",
"tirani": "tiran",
"tk": "tidak",
"tkg": "tukang",
"tkg": "terima kasih",
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"tll": "terlalu",
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"tnp": "tanpa",
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```

```

"tsb": "tersebut",
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"u/": "untuk",
"uasai": "kuasa",
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"uda": "sudah",
"udah": "sudah",
"udh": "sudah",
"ugm": "universitas gajah mada",
"ui": "universitas indonesia",
"ujg": "ujung",
"ujung2nya": "ujung-ujungnya",
"ul": "ulangan",
"ultah": "ulang tahun",
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"utang": "hutang",
"utip": "kutip",
"utk": "untuk",
"utul": "ujian tertulis",
"uu": "undang-undang",
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"valid": "sah",
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"wagub": "wakil gubernur",
"wamil": "wajib militer",
"war": "perang",
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```

```

"waria": "wanita pria",
"warkop": "warung kopi",
"warnet": "warung internet",
"warteg": "warung tegal",
"wartel": "warung telekomunikasi",
"waspadalah": "waspada",
"wat": "buat",
"watuk": "batuk",
"who": "world health organization",
"wk": "tertawa",
"wkt": "waktu",
"wkwk": "tertawa",
"wkwkkw": "tertawa",
"wtf": "what the fuck",
"wth": "what the hell",
"x": "tidak",
"xan": "tak akan",
"xew": "apa",
"xixixi": "tertawa",
"y": "ya",
"ya": "iya",
"yad": "yang akan datang",
"yap": "iya",
"yapz": "iya",
"yaudah": "ya sudah",
"yauwda": "ya sudah",
"yawdah": "ya sudah",
"ybs": "yang bersangkutan",
"yg": "yang",
"yi": "yaitu",
"yl": "yang lain",
"yng": "yang",
"yo": "iya",
"yoha": "iya",
"yowes": "ya sudah",
"yuk": "ayo",
"yup": "iya",
"ywdh": "ya sudah",
"zonk": "bodoh"
}

```

### 31. spell.py

```

import json
import pandas as pd

with open('slang.dic') as f:
    slang = json.load(f)

kamus_slang = pd.read_json('slang.dic', typ = 'series')
pd.DataFrame(kamus_slang.items(), columns = ['contraction',
'original']).head()
contractions_list = list(kamus_slang.keys())

def spell_check(text):
    words = []
    for word in text.split():

```

```
        if word in contractions_list:
            words = words + kamus_slang[word].split()
        else:
            words = words + word.split()

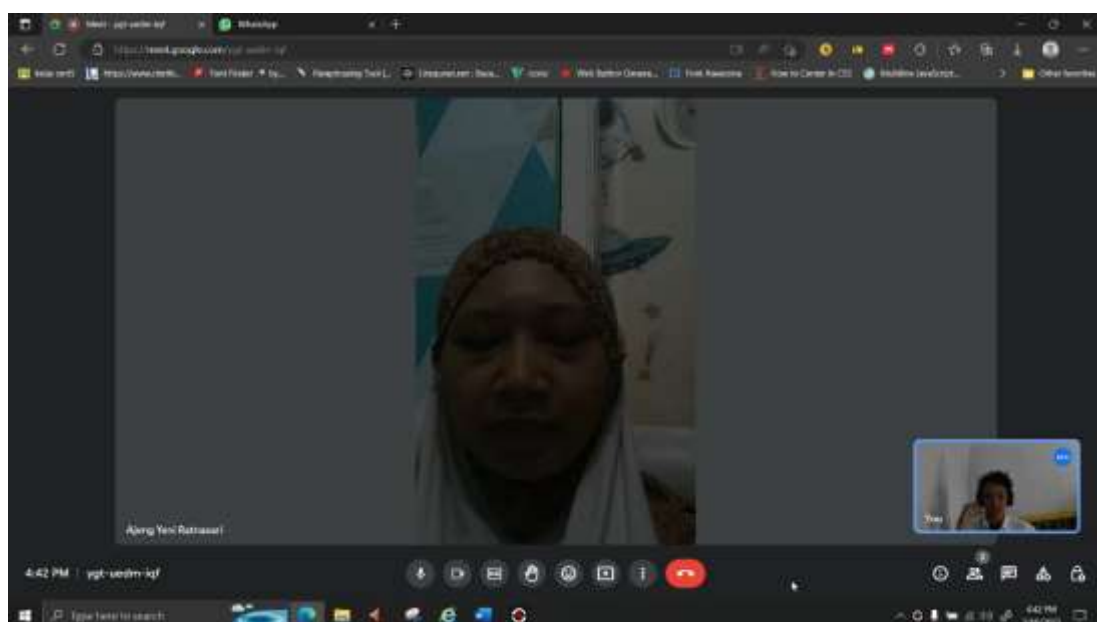
text_converted = " ".join(words)
return text_converted
```

## Lampiran II Dokumentasi dengan Narasumber

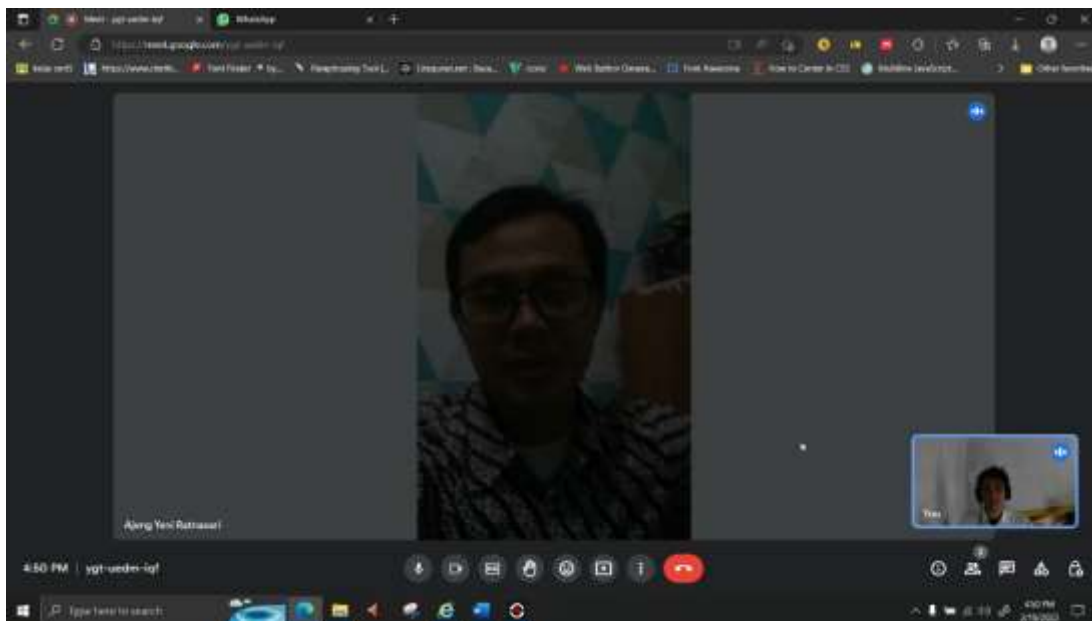
1. Wawancara daring dengan Bapak Sukma Erawan, S.Kom, Guru SMA Negeri 68 Jakarta.



2. Wawancara daring dengan Ibu Ajeng Yeni Ratnasari, S.Pd, Guru Pondok Pesantren Alfassalam.



3. Wawancara daring dengan Bapak Alan Syahwandi, S.Pd.I, Guru SMP Negeri 3 Bogor.



4. Wawancara luring dengan Bapak Ahmad Arfandi, S.Kom, dan Ibu Virgawaty Dewy, S.Pd, Guru SMA Negeri 65 Jakarta.



5. Wawancara luring dengan Ibu Dita Putri Bestari, S.Pd, dan Ibu Ayu Nulantika, S.Pd, Guru SMA Negeri 65 Jakarta.



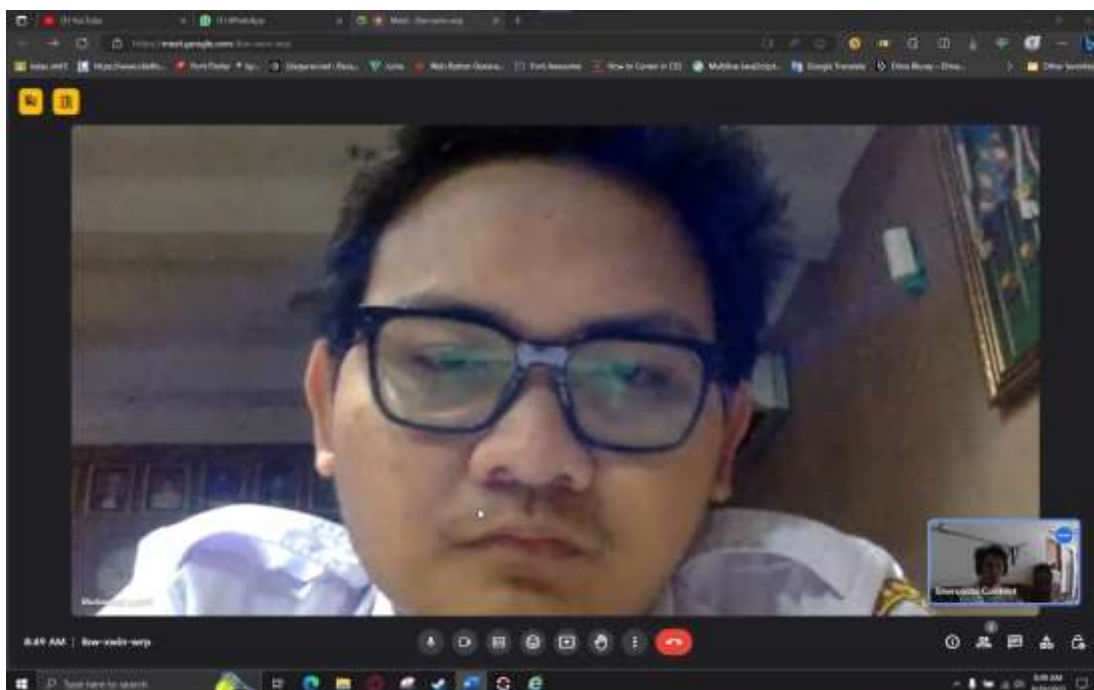
6. Wawancara daring dengan Ibu Dian Mustika Dewi Priyandari, S. Sos., M.M, Dosen Universitas Suryadarma.



7. Wawancara daring dengan Bapak Zamroni Riza, S.E, Guru SMA Sapta Kharisma Jakarta.



8. Wawancara daring dengan Bapak Muhammad Lutfi, S.Pd, Guru SMA Negeri 113 Jakarta.





**Lampiran III Software Requirement Specification**

---

# ***Software Requirements Specification***

for

## **Easysay**

Version 1.0 approved

Prepared by

119140114

Geizka Rozilia Ruicosta

1 September 2023

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## Revision History

Name	Date	Reason For Changes	Version

## 1. Pendahuluan

### 1.1 Tujuan Penulisan Dokumen

Dokumen ini, yang merupakan Software Requirement Specification (SRS) untuk aplikasi "Easysay," bertujuan untuk memberikan panduan rinci terkait kebutuhan fungsional dan non-fungsional dari aplikasi. Tujuan utama penulisan dokumen ini adalah:

1. Memberikan Panduan: Menyajikan panduan yang komprehensif tentang fitur dan karakteristik aplikasi "Easysay" untuk memandu tim pengembangan dalam pengembangan perangkat lunak yang efektif dan sesuai dengan kebutuhan pengguna.
2. Komunikasi dengan Pemangku Kepentingan: Memberikan wawasan yang jelas kepada pemangku kepentingan, seperti pengembang, pengguna, dan pihak terkait lainnya, tentang fungsi dan tujuan utama aplikasi.
3. Dasar Evaluasi: Menjadi dasar evaluasi kinerja dan keberhasilan aplikasi "Easysay" selama dan setelah pengembangan.

### 1.2 Audien yang Dituju dan Pembaca yang Disarankan

Dokumen ini ditujukan kepada berbagai pemangku kepentingan yang terlibat dalam pengembangan, penggunaan, dan pemeliharaan aplikasi "Easysay." Audien yang dituju meliputi:

1. Tim Pengembang: Mendapatkan pandangan mendalam tentang kebutuhan aplikasi dan petunjuk teknis yang diperlukan untuk implementasi dan pengembangan aplikasi kedepannya.
2. Manajemen Proyek: Memahami ruang lingkup proyek, jadwal waktu, dan sumber daya yang diperlukan untuk pengembangan aplikasi.
3. Pengguna Akhir (Pengajar): Mengetahui fungsionalitas dan cara penggunaan aplikasi untuk keperluan penilaian esai otomatis.

### 1.3 Batasan Produk

Batasan produk melibatkan keterangan mengenai fitur atau elemen tertentu yang tidak akan disertakan dalam aplikasi "Easysay." Batasan ini berguna untuk memberikan pemahaman tentang ruang lingkup aplikasi dan batasan yang mungkin mempengaruhi penggunaan dan implementasinya. Batasan produk untuk "Easysay" mencakup:

1. Batasan Penggunaan: Aplikasi ini dirancang untuk penilaian esai teoritis dan bukan untuk ujian berbasis pilihan ganda atau bentuk ujian lainnya.
2. Batasan Bahasa: Meskipun mendukung bahasa Indonesia dan Inggris, aplikasi ini tidak dapat menilai esai dalam bahasa lain. Aplikasi ini dapat menerapkan bahasa lainnya apabila dikembangkan lebih lanjut.

### 1.4 Definisi dan Istilah

Berikut adalah beberapa definisi dan istilah yang digunakan dalam dokumen ini:

1. Easysay: Nama aplikasi penilaian esai otomatis yang dibahas dalam dokumen ini.
2. Pengajar: Termasuk guru dan dosen yang menggunakan aplikasi untuk menilai esai pelajar.
3. Pelajar: Termasuk siswa dan mahasiswa yang jawabannya dinilai menggunakan aplikasi.

### 1.5 Refrensi

Referensi mencakup sumber daya dan dokumen lain yang digunakan sebagai acuan dalam penyusunan dokumen ini. Referensi dapat termasuk buku, artikel, atau standar industri yang relevan dengan pengembangan aplikasi dan penilaian esai otomatis.

Referensi untuk aplikasi Easysay dapat dilihat pada Tugas Akhir yang dibuat oleh Geizka Rozilia Ruicosta dengan judul "Aplikasi Penilaian Esai Ootomatis Berbahasa Indonesia dan Inggris Menggunakan Metode *Test-Driven Development*".

## 2. Deskripsi Keseluruhan

### 2.1 Deskripsi Produk

Aplikasi "Easysay" dirancang sebagai sistem penilaian esai otomatis yang dapat membantu pengajar (guru/dosen) mengevaluasi jawaban esai pelajar (siswa/mahasiswa) secara efisien. Aplikasi ini, yang disebut sebagai "Easysay," memungkinkan pengguna untuk memeriksa sejumlah besar jawaban esai dalam waktu yang relatif singkat. Fitur kunci termasuk pemilihan bahasa (Indonesia atau Inggris), penilaian tunggal dan jamak, serta integrasi model machine learning menggunakan TF-IDF dan Cosine Similarity.

### 2.2 Fungsi Produk

Fungsi aplikasi "Easysay" dapat dilihat pada daftar dibawah ini:

1. Penilaian esai otomatis menggunakan model machine learning.
2. Pilihan bahasa untuk penilaian esai (Indonesia atau Inggris).
3. Penilaian tunggal: Memeriksa satu pasangan jawaban esai pengajar dan pelajar.
4. Penilaian jamak: Memungkinkan pengguna mengunggah berkas CSV dengan jawaban pelajar yang berisi nama dan jawaban.
5. Tampilan hasil penilaian dengan skor dan detail pasangan jawaban.

### 2.3 Penggolongan Karakterik Pengguna

Aplikasi "Easysay" ditujukan khusus untuk satu golongan pengguna, yaitu:

1. Pengajar (Guru/Dosen): Pengguna yang akan menggunakan aplikasi "Easysay" untuk memasukkan jawaban esai pengajar dan pelajar. Pengajar bertanggung jawab atas proses penilaian dan evaluasi menggunakan fitur-fitur yang disediakan oleh aplikasi.

### 2.4 Lingkungan Operasi

Perangkat lunak "Easysay" akan beroperasi dalam lingkungan sebagai berikut:

1. Platform: Dapat dioperasikan di sistem operasi Windows atau Linux.
2. Perangkat Keras: Memerlukan Node.js (minimal versi 16.16.0) untuk frontend dan Python (minimal versi 3.11.5) untuk backend.
3. Sistem Operasi: Kompatibel dengan Windows atau Linux.

### 2.5 Batasan Desain dan Implementasi

Batasan desain dan implementasi aplikasi "Easysay" ini dapat dilihat sebagai berikut:

1. Batasan Penggunaan: Aplikasi hanya ditujukan untuk menilai esai dengan jawaban benar atau teoritis.
2. Batasan Bahasa: Meskipun mendukung bahasa Indonesia dan Inggris, aplikasi tidak dapat menilai esai dalam bahasa lain.
3. Keamanan: Tidak ada kebutuhan keamanan khusus yang diimplementasikan.

## 2.6 Dokumentasi Pengguna

Dokumentasi pengguna untuk aplikasi "Easysay" akan tersedia melalui halaman bantuan di situs web resmi. Dokumentasi ini mencakup:

1. FAQ (Frequently Asked Questions): Sekumpulan pertanyaan umum yang sering diajukan oleh pengguna beserta jawaban rinci yang memberikan pemahaman lebih lanjut tentang berbagai aspek dan fitur aplikasi.
2. Panduan Pengguna:
  - a. Cara Menggunakan Aplikasi: Tutorial langkah demi langkah yang menjelaskan cara memanfaatkan fitur-fitur utama aplikasi.
  - b. Penilaian Tunggal: Panduan khusus untuk menggunakan fitur penilaian tunggal, termasuk memasukkan jawaban pengajar dan pelajar.
  - c. Penilaian Jamak: Instruksi untuk menggunakan fitur penilaian jamak, termasuk langkah-langkah mengunggah berkas CSV dan spesifikasinya.

Dengan menyediakan dokumen ini secara daring, diharapkan pengguna dapat dengan mudah mengakses informasi yang mereka butuhkan dan memanfaatkan fitur-fitur aplikasi "Easysay" secara optimal.

### 3. Kebutuhan Antarmuka Eksternal

#### 3.1 Antarmuka Pengguna (User Interfaces)

Antarmuka Pengguna pada aplikasi "Easysay" didesain untuk memberikan pengalaman pengguna yang intuitif dan efisien. Beberapa karakteristik antarmuka pengguna meliputi:

1. Bahasa Pilihan: Pengguna dapat memilih bahasa antarmuka, yaitu Bahasa Indonesia atau Bahasa Inggris.
2. Halaman Utama (Home): Menyediakan navigasi untuk memilih metode penilaian tunggal atau jamak, serta memilih bahasa dan mengakses halaman bantuan.
3. Penilaian Tunggal: Formulir input untuk memasukkan jawaban esai pengajar dan pelajar dengan tombol "Periksa".
4. Penilaian Jamak: Formulir untuk mengunggah berkas CSV dengan tombol "Periksa" dan opsi untuk menentukan kolom nama dan jawaban pelajar.
5. Hasil Penilaian: Menampilkan tabel pasangan nama, jawaban, dan skor esai pelajar dengan opsi untuk mengunduh dalam format PDF.

#### 3.2 Antarmuka Perangkat Keras (Hardware Interface)

Antarmuka perangkat keras aplikasi "Easysay" mencakup karakteristik logis dan fisik antara perangkat lunak dan komponen perangkat keras sistem, seperti:

1. Sistem Operasi: Kompatibel dengan Windows dan Linux.
2. Node.js dan Python: Memerlukan perangkat keras yang mendukung Node.js (minimal versi 16.16.0) untuk frontend dan Python (minimal versi 3.11.5) untuk backend.

#### 3.3 Antarmuka Perangkat Lunak (Software Interface)

Aplikasi "Easysay" akan berjalan menggunakan perangkat lunak Node.js dan Python dengan versi spesifik yang telah dirincikan sebelumnya.

#### 3.4 Antarmuka Komunikasi (Communication Interface)

Antarmuka komunikasi aplikasi "Easysay" mencakup persyaratan berbagai fungsi komunikasi. Protokol komunikasi seperti HTTP digunakan untuk komunikasi antara frontend dan backend.

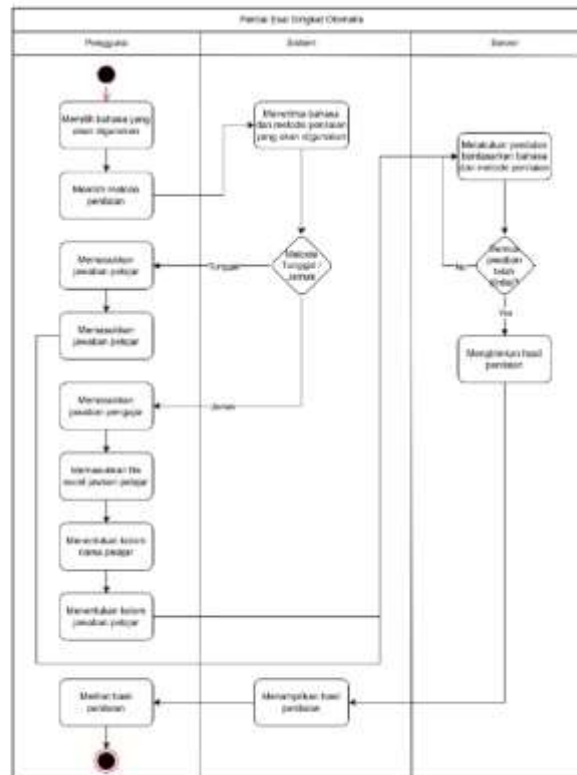
Dokumen ini memberikan gambaran umum mengenai antarmuka eksternal yang dibutuhkan oleh aplikasi "Easysay." Rincian desain antarmuka pengguna akan didokumentasikan secara lebih terperinci dalam spesifikasi antarmuka pengguna terpisah. Tidak ada antarmuka database yang diperlukan karena aplikasi tidak menyimpan hasil penilaian.





## 4.2 Activity Diagram

*Activity diagram* digunakan untuk menggambarkan alur pekerjaan dari aktivitas pada suatu sistem.



Pada gambar tersebut dapat diperhatikan bahwa aplikasi dimulai dengan pengguna memilih bahasa dan metode penilaian yang akan digunakan. Kemudian berdasarkan pilihan tersebut, sistem akan menentukan masukan yang dapat dilakukan oleh pengguna. Apabila semua masukan telah diisi, kemudian sistem akan meminta *server* melakukan penilaian yang diminta oleh pengguna berdasarkan bahasa dan metode penilaian. Setelah *server* selesai melakukan penilaian, *server* akan mengirimkan hasil penilaian untuk ditampilkan pada aplikasi agar dapat dilihat oleh pengguna.

## 5. Kebutuhan Non-Fungsional

Untuk meningkatkan kenyamanan pengguna saat menggunakan aplikasi penilaian esai otomatis berbasis website ini, diperlukan beberapa kebutuhan non-fungsional yang ingin dikembangkan. Kebutuhan ini dapat meningkatkan retensi pengguna agar lebih nyaman saat menggunakan aplikasi ini. Pada tabel dibawah ini dapat dilihat kebutuhan non-fungsional yang akan dipenuhi.

ID	Deskripsi
NF1	Aplikasi <i>website</i> dapat digunakan pada berbagai perangkat, komputer dan mobile
NF2	Aplikasi <i>website</i> dapat dijalankan pada peramban web yang mendukung ES6
NF3	Aplikasi <i>website</i> memiliki tampilan yang menyesuaikan dengan ukuran layar perangkat yang digunakan (responsif)

**Lampiran IV Hasil Responden System Usability Scale (SUS)**

Nama anda beserta gelar (contoh: Jessica Burgh, S.Pd)

16 responses

Muhammad Lutfi, S.Pd

Ajeng Yeni Ratnasari, S.Pd

Dita Putri Bestari S.Pd

Ayu Nulantika S.Pd

Ahmad Arfandi, S.Kom

Virgawaty Dewy, S.Pd

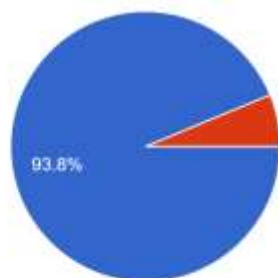
Isma Nurfitriah, S.Pd

Renny Noviani Riandy, S.S

Sukma Erawan, S.Kom

Peran anda

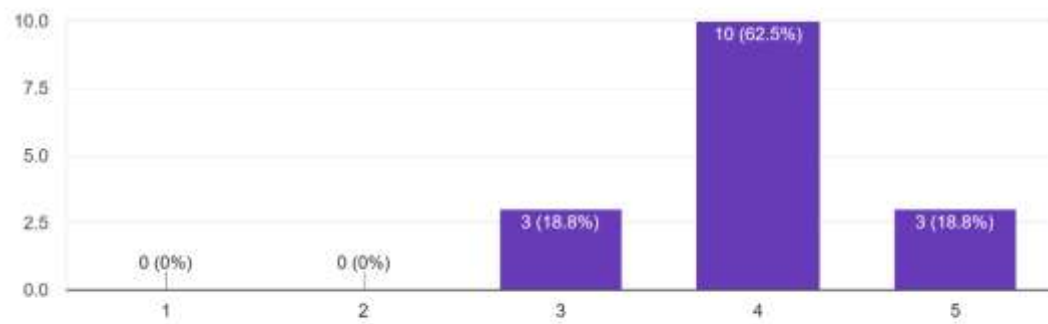
16 responses



● Guru  
● Dosen  
● Lainnya

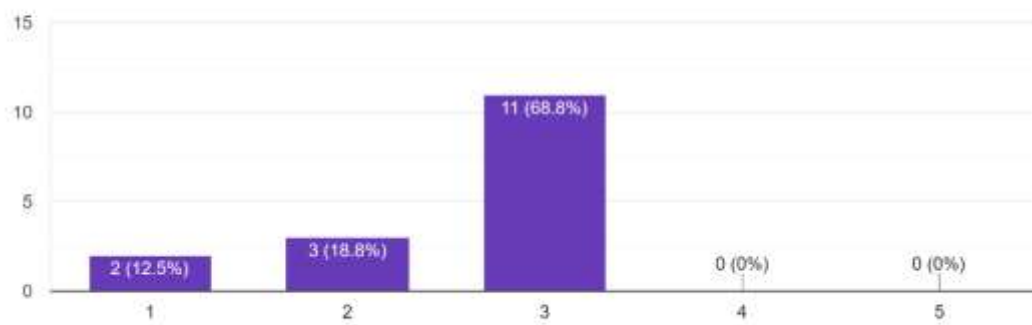
Saya berpikir akan menggunakan aplikasi penilaian esai otomatis berbasis web ini lagi

16 responses



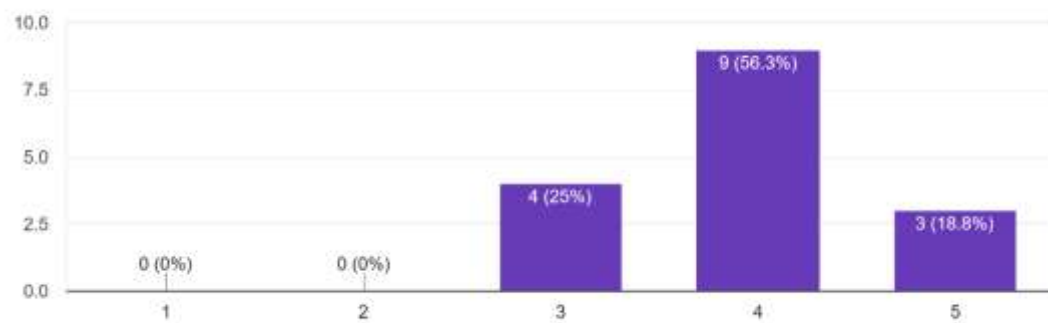
Saya merasa aplikasi penilaian esai otomatis berbasis web ini sulit digunakan

16 responses



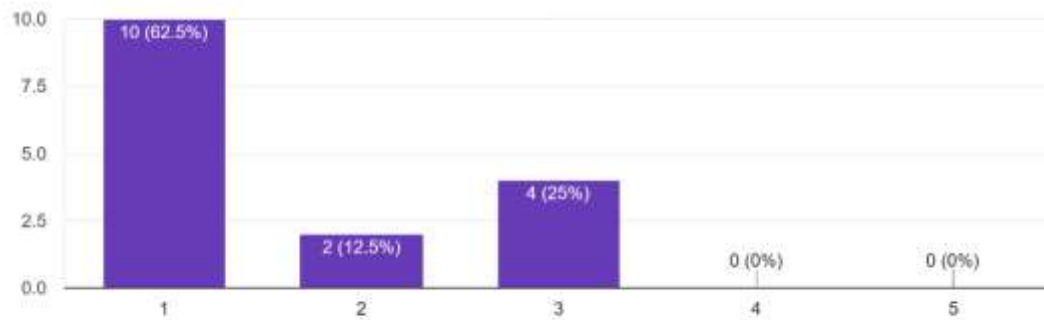
Saya merasa aplikasi penilaian esai otomatis berbasis web ini mudah digunakan

16 responses



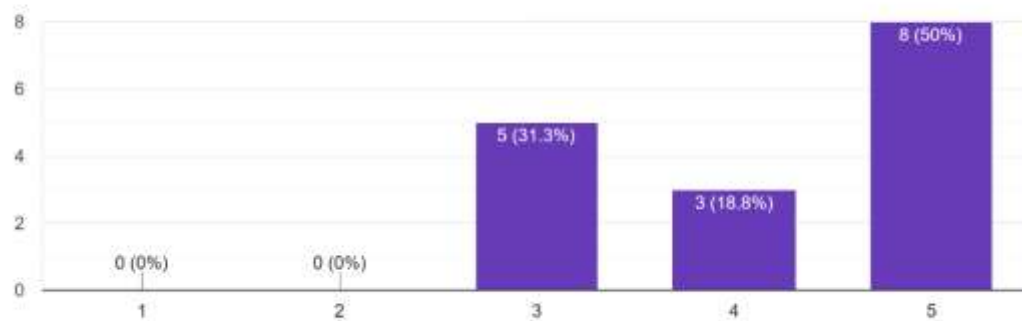
Saya membutuhkan bantuan dari orang lain atau teknisi dalam menggunakan aplikasi penilaian esai otomatis berbasis web ini

16 responses



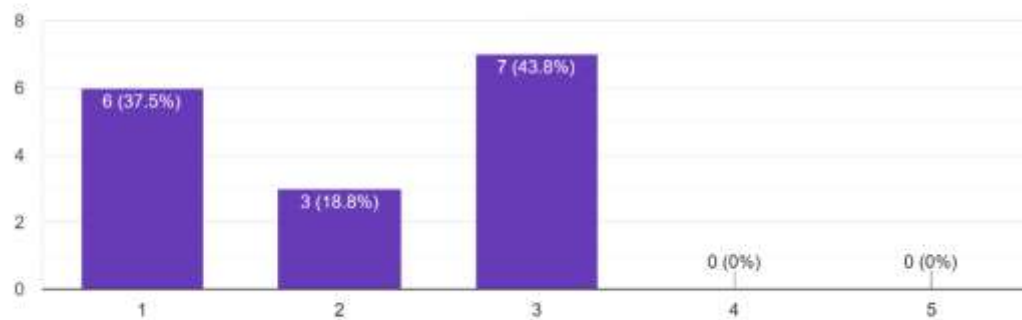
Saya merasa fitur-fitur aplikasi penilaian esai otomatis berbasis web ini berjalan dengan semestinya

16 responses



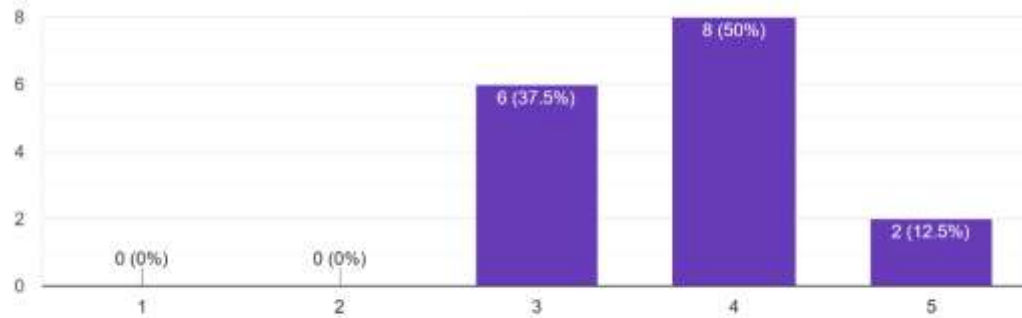
Saya merasa banyak hal yang tidak konsisten / tidak serasi pada aplikasi penilaian esai otomatis berbasis web ini

16 responses



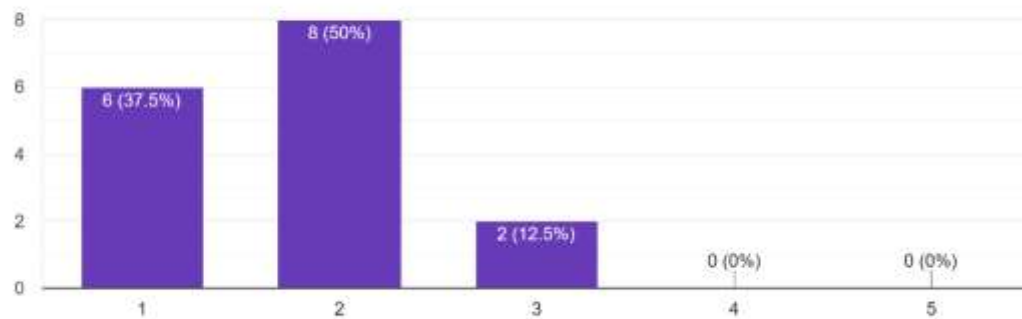
Saya merasa orang lain akan memahami cara menggunakan aplikasi penilaian esai otomatis berbasis web ini dengan cepat

16 responses



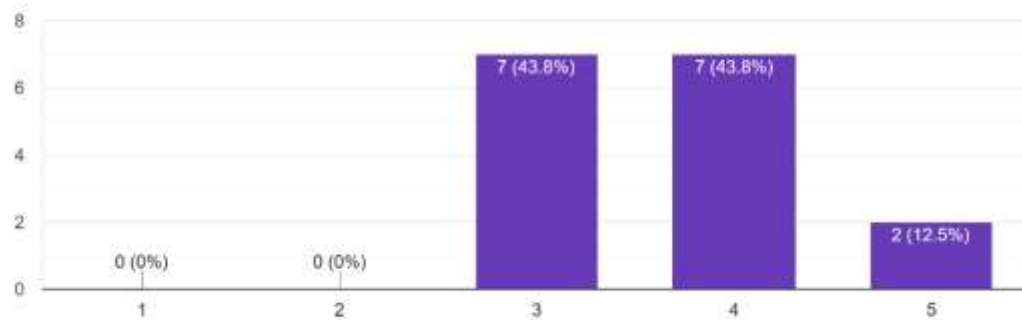
Saya merasa aplikasi penilaian esai otomatis berbasis web ini membingungkan

16 responses



Saya merasa tidak ada hambatan dalam menggunakan aplikasi penilaian esai otomatis berbasis web ini

16 responses



Saya perlu membiasakan diri terlebih dahulu sebelum menggunakan aplikasi penilaian esai otomatis berbasis web ini

16 responses

