Speech to Text Server

REST api wrapper to use for converting speech to text for Tour Guide Translator Project.

Getting Started

These instructions will get you a copy of the project up and running on your local machine for development purposes. See deployment for notes on how to deploy the project on a live system.

Prerequisites

To use our project, you'll need to install Node.js to install our dependencies and run our project.

To run on a local machine, type:

```
node index.js
```

in your terminal.

Keys

To use the **Google** Speech to Text service you'll need a service key.

To get a key, login to Google Cloud Platform and create an new project. Navigate to APIs & Services -> Credentials. Under Credentials, you can press create credentials and create a Service account key. Copy the key as json and and put that in our translator.json file.

To use our backup Speech to Text service from **Watson** you'll need a username and a password from bluemix.net:

Login to the IBM cloud and create a new project. Navigate to your new project -> service credentials. Press the *New credential* button. Then you'll receive a json object with a username and a password. Copy that username and password to line 41 and 42 in our index.js.

Methods

Get

/google and /watson

Required parameters:

The header must take 3 parameters:

- Athorization -> Token which the server compares to its own token in line 15 at index.js
- Content-Type -> multipart/form-data
- Accept -> application/json

The body must take 2 parameters:

- file -> audio file with sampleRateHertz as 44100 (If using /google)

- language -> language code of audio file (example is-IS for icelandic. Watson requries en-US_BroadbandModel)

Success Response for speech "hello"

/google -> service parses google transcript

```
Code: 200
Content: "hello"
```

/watson -> front end parses transcript

```
Code: 200
Content: {
  "results": [
    {
    "word_alternatives": [],
    "alternatives":[
      {
        "timestamps":[
          [
            "hello",
            0.87,
            1.37
          ]
        ],
        "confidence": 0.774,
        "transcript": "hello"
```

```
        }
      ],
      "final": true
    }
  ],
  "result_index": 0
}
```

Error Response for both services

Authorization error

```
Status: 401 Unauthorized
Content:{
    "error": "Authorization failed"
}
```

Recognizion Error

```
Status: 400
Content: {
    "ERROR": "some error from speech service.."
}
```

Conversion Error

```
Status: 400
Content: {
  "error": "Could not convert audio file"
}
```

Deployment

To deploy, all you need to do is push to master branch as Heroku has a webhook to retreive the repo when new changes occur.

Authors

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