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Repository: [CS326-important/space-deer](https://github.com/CS326-important/space-deer)

#### Overview:

Textifai analyzes user-submitted text and generates statistics and insights based on the content of that text. The site uses NLP-based algorithms with the help of Indicoio and NLTK to perform the analyses. The current insights include subjects, emotion, personality, grammatical, and general. Users can submit their own text and then view the analysis, as well as view and comment on the analysis of any other user's submitted text.

#### Design Overview:

Logging in/out is available from the website's navbar. If users aren't logged in, they're prevented from viewing the account and text input pages and instead redirected to the login page. In addition, certain parts of pages also aren't visible if users aren't authorized. For example, users cannot see their contributions to the overall general insights, and there's different behavior for when the user is viewing their own or someone else's submission. For all authenticated users, the "New Submission" button redirects to the text input page successfully, and they have the ability to add comments to the analyzed text. If users are viewing their own submissions, the "Edit" button is visible and they're able to edit that submission. If a user isn't authenticated at all, the "New Submission" button redirects to the login page, and the comment input box is replaced with the text "Login to add a comment".

User interaction with forms is primarily accomplished via the text input and feature output pages. When users enter text into the text area on the text input page (accessed via "Add" on the navbar) and click the "Analyze" button, the text is sent to the backend where various text analysis algorithms are used to analyze the text. The results are saved in the Text, Insights and GrammaticalInsights models. Users are then redirected to the text analysis page which contains results for the given submission. On the bottom of this page, users also have the ability to add comments visible to all users to the analyzed text. If the analyzed text belongs to the user viewing it, the "Edit" button is visible. This opens a dialog box that contains an editable text area with the submitted text. Upon clicking save, the text model's content field is updated, the content is re-analyzed, and all the insights associated with the text are updated.

#### Problems/Successes:

We originally planned on using IBM Watson for the majority of the text analysis. Since IBM only offers a 30-day trial for the free option, we used Indicoio instead. This ultimately turned into a success, since Indicoio accomplishes nearly the same thing as the IBM Watson Tone Analyzer, and allows 10,000 free API calls per month. Everything else went smoothly.

#### Team Choice:

We plan on deploying our application on either Heroku or Digital Ocean, depending on whichever is better for getting all our dependencies installed.

