

- **Project Proposal Components** [15 pts]

Write up a proposal file (in the file proposal.txt, or .docx, or .pdf) which should include the following components:

- **Project Description** [2.5 pts]: The name of the term project and a short description of what it will be.

Text Simplifier. The program will simplify complex text into a personalized simpler version based on the user's preferences. The project is designed for people with learning differences so that they can get a personalized text because they might struggle with some words more than other words. Preferences could be like, no words with "b and d", no uncommon words, no words with multiple very different meanings. The simplified version will also provide other synonyms/a definition when the user hovers over the word.

- **Similar projects** [2.5 pts]: A 1-2 paragraph analysis of similar projects you've seen online, and how your project will be similar or different to those.

There are some similar projects online like rewordify (rewordify.com) which simplifies text, however it only simplifies text based on what they think is considered a hard word and a simple synonym. My project would be different because the program would know the types of words the user knows and be able to simplify using those words. People with learning differences struggle with learning new words and it takes a lot more effort than most people realize. Rewordify tries to make the person learn new words but my program would try and make it as easy for the user by using words they already know so that the user can focus on actually understanding the text and continue their assignment.

There is also a summarizer (quillbot.com/summarize) available however this doesn't take the vocabulary into account and only finds the most important sentences from a text and presents them to the reader. There may still be difficult words but this may help people with learning disabilities. However, my project is aimed towards simplifying textbooks and losing large chunks of the text would not be useful while reading a textbook.

- **Structural Plan** [2.5 pts]: A structural plan for how the finalized project will be organized in different functions, files and/or classes.

I will have a csv with 1000 common words that won't be simplified and that we would ideally like to have in the simplified version. The user would be able to change these words if there are some they don't know they can remove or they can add words. I will create a button, checkbox, and textbox class. I will have different game modes for the settings/personalization screen, and the textbox screen. I will have different methods for simplifying the text.

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Algorithmic Plan [2.5 pts]: A plan for how you will approach the trickiest part of the project. Be sure to clearly highlight which part(s) of your project are algorithmically most difficult, and include some details of how you expect to implement these features.

Graphics: the hardest part will be creating the textbox. I would like to make it a textbox class. The professor suggested that I first create it not as a class, just as items in the draw classes and then I would create the button class. And then I could edit my button class and transform it into a textbox class. One of the hardest parts will be knowing when the user clicked on the textbox. Another difficulty will be programming the selection of the word to provide other synonyms/a def. The professor suggested I start with having the selected word in Caps and then having the user use the arrow keys to go right and left to another word.

Simplifying the text: It will be difficult to simplify the text and have the text still make sense. Currently I am running into trouble with verb tenses, so I will need to have code that checks the tense and then the synonym will need to also be the same tense.

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Timeline Plan [2.5 pts]: A timeline for when you intend to complete the major features of the project.

TP1 - Sun nov 20 - Have a working text box, not as a class, and have a class button,

End of thanksgiving Sun nov 20 - Have the text box as a class, have multiple pages,

TP 2 - Wed nov 30 - have personalizations working, have check boxes, have the highlight/Uppercase feature working

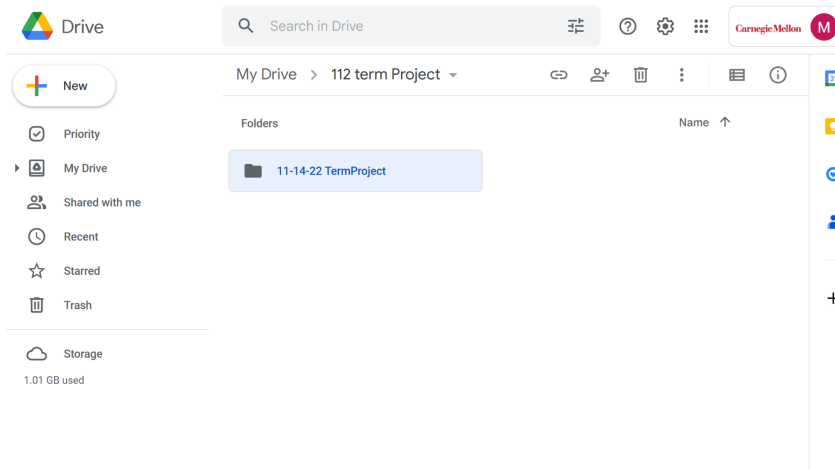
TP 3 - Wed Dec 7 - have tenses and most of the simplification working

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Version Control Plan [1.5 pts]: A short description **and image** demonstrating how you are using version control to back up your code. Notes:

- **You must back up your code somehow!!!**
- **Your backups must not be on your computer** (ideally, store them in the cloud)

I will be backing up my code on google drive. Every time I add a new feature I will upload my current code.



- **Module List** [1 pts]: A list of all external modules/hardware/technologies you are planning to use in your project. Note that any such modules must be approved by a tech demo. If you are not planning to use any additional modules, that's okay, just say so!

I will be using nltk to get a list of synonyms for a word. The module has been approved.

- **Storyboard** [5 pts]
Generate a storyboard that demonstrates how a user would interact with your finished project. A storyboard is just a series of sketches showing (roughly) what your project will look like. Your storyboard should have at least six panels, and at least three of those should demonstrate features within the project. You may scan or take a picture of your storyboard and include it in the directory as the file storyboard.png (other acceptable filetypes include .gif, .jpg, and .pdf).

<https://drive.google.com/file/d/1OAs9GOh9GOZEhv81YytqHgg85RzuiNH8/view?usp=sharing>

- Include any preliminary code files you have already created at this stage. Some code at this stage would be helpful, but not necessary. It may be prototype code, and so perhaps may not be part of your final project. It also may or may not have any user interface.

- **Your submission MUST be a SINGLE zip file submitted to Autolab.** You may submit multiple times, but we will only look at your last submission. This is true for all term project deliverables. You will not receive any credit if you do not submit a zip file. If your file is larger than 10MB, [read here for info on how to submit](#). Ask for help if you do not understand how to create a zip file after reading this whole document.
- Note: Your TP0 and TP1 collectively count for one quiz grade.

TP1 Update:

Many students update their design plans due to unforeseen problems or new ideas. You must add a new section to your design proposal, 'TP1 Update'; in this section, you should list any design changes you have made. If you made no changes, simply say so in this section. You do not need to update your storyboard, but you should keep it in your design directory. If you do not add this update section, you will be penalized 5 points.

I haven't made any design changes. However, I have found some new difficulties. I need to figure out how to separate pastes between lines. I also need to figure out how to deal with periods, apostrophes and other special characters because the word won't be recognized and won't have any simpler synonyms found. I also need to figure out a way to have the text box class split things into rows. Because I manually do it for inputs but I want it to work with the output in a seamless way.

I have accomplished more than I've planned. I have the button class, and a checkbox class ready to go. I also have the uppercase highlight feature working so now I am fully ready to add the personalizations and different pages, and create the textbox class.

TP2 Update

Your submission should include the design directory from the previous deliverables. The proposal should have a new section, 'TP2 Update', which includes any design modifications made since the previous update (or says that no changes were made if no changes were made).

I added a sign in page so that you can select the right file. No other changes

TP3 Update

Your submission should include the design directory from the previous deliverables. The proposal should have a new section, 'TP3 Update', which includes any design modifications made since the previous update (or says that no changes were made if no changes were made). You will not be penalized if this section is not included, but it may negatively impact your mentor's ability to grade your project, as they may not be aware of new features you've added.

I misunderstood the previous TP update and thought it was just for design instead of features. This TP I implemented the highlighting feature and improved some user experience things. I improved how buttons looked and I improved the textboxes to work with commas and periods because before if there was a comma it was not able to recognize the word. In the previous TP I implemented the naive bayes algorithm, Text box class, Changing tenses to match new simplified version (complex implementation), Simplification of text, Uppercase feature to show synonyms/definitions, Reading/writing into files, Login page.