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Escape the Zombie - Project Report

Packages used

1. Tkinter was a great package that made coding a GUI very easy and intuitive.
2. Python Imaging Library, on the other hand, was not the most friendly. We probably should have worked with Pillow instead.

Problems encountered

- There are obvious problems that occur when working on a specific part of the project within a group: each person may have different coding styles, and it is difficult, though certainly not impossible to try to make each individual part work seamlessly into the whole. We overcame this problem by making sure we worked together as much as possible so we would all be aware of the foundational structure of our program.
- When deciding on an initial structure for our GUI, we played around with the idea of having one window that would reset on top of each other for the three main parts of the game (game start, game play, game stats). In the end, we decided to combine all three frames into one larger window for convenience.
- PIL would not display .jpg image files, so we had to switch to .ppm instead.
- It was at times difficult to acquaint ourselves with the way Tkinter works, in terms of navigating between variables and methods that would work simply in Python, but would not have a parallel method in Tkinter. For example, when creating the incorrect letters bank, we decided to create a string variable over a StringVar because it was easier to add to a regular string and reset the label each time, over trying to find an attribute to adding to a StringVar.
- We originally used the built-in dictionary to choose our words, but that was a bad idea because most words are not used in daily vocabulary. Instead, we found a list of the 10,000 most common English words, and used that. We used word lengths to determine difficulty, but this is an imperfect way to pick words. The best way would be to choose words based on how common they are, but we could not figure out a good resource to get a huge list of these ranked words.

Things that worked out well

We were able to bind the Return key to our game, which made the gameplay experience much more enjoyable! Also, the game works, which is great!

Things that didn't work well

1. We wanted to have our game listen to the keyboard, without needing the user type into a textbox and submit that entry. Because we couldn't figure how to do that, we had to go with the entry and submit button method instead.

2. We also hoped to make the game an even more fun experience by allowing the player to insert a photo of his own face as the damsel in distress. However, we did not have the knowledge to implement this, and we did not have the time to implement this cool feature.

Was Python the right tool for the project?

Python was great, but only because we planned our project around a GUI. We would have preferred to write a simple web app, probably using HTML, CSS, and Javascript, to create a more interactive game that would have different pages load as the game went on, and even incorporate music.

Personal Reflections

Michelle: I had a great time working with Sean and Sophie on this GUI -- I remember when we were first throwing around ideas for the project, I had no idea what to expect for the final product. I'm really satisfied with this game and I've been playing it since we finished :) Thanks for the opportunity!

Sean: This was a lot of fun! I've never had the chance to create a GUI for my own game, and getting the chance to do it for this class, while learning how to use Tkinter, was a rewarding experience for me.

Sophie: I learned a lot from Michelle and Sean--we were a great team and I'd love to go more in-depth to learn about more of the awesome things that Python can do!