7Koder

An encoding/decoding system

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Rules/Working

- Asks the user whether to encode or decode.
- Checks the answer to make sure it makes sense.
- Asks the user for the message to be encoded/decoded.
- Checks the message complies with the requirements for translation.
- Outputs the translation

Workflow

- Designing the algorithm (-7,ASCII,same_lenght)
- Writing down a general idea of the steps the code should follow.
- Developing each step as a separate function to test and improve.
- Figuring out how to fit the parts together and make it interact with the user.
- Fixing the problem and bugs

Challenges

- Not even knowing where to start
- The second level of encoding being ambiguous to decode, so having to add another layer to give all the characters the same lenght.
- The decoder not working properly for dumb errors on the code.
- The decoder breaking down if the message passed was not encoded in my code.
- The final function having a tricky structure of for loops nested in while loops nested in while loops.
- Keeping calm when things don't work
- Balancing pragmatism with originality and robustness.

Learnings

- Panicking won't help.
- Breaking it down into small pieces helps you advance faster and understand better your code once you encounter problems in the complex version.
- Sometimes you need to change the order of your conditions or some while loops will never break.
- Indentation in Jupyter sucks.
- Be organized.
- Comment everything.
- Listen to your teammates' ideas and ask for advice.

Possible Improvements

- Make the encoding more complex and difficult to break.
- Make the decoding code less redundant.
- Improve the inputting of options and the interactions with the user.
- Possibly add safeguards in the decoding process