BBF 101E: Introduction to Information Systems – 2024-2025 Fall
Term Project: Personalized Word Prediction Game
Due Date: 19.01.2025 23.59

Project Overview:

Develop a **two-page** personal website hosted with GitHub Pages, featuring an **'About Me'** section and **a custom word prediction game (similar to Hangman)** using the HTML, CSS, and JavaScript codes you learned in class.

🏠Homepage (About Me): (30 points)

Your GitHub Pages website should feature a homepage where users will see the details about you and a navigating button for the Word Prediction Game. Your About Me section **should contain at least** the following items:

- **Personal Introduction**: Feature your name, a photograph, and a brief bio.
- **Academic Interests**: Briefly describe your academic interests or study areas.
- **Page Design**: Use CSS to style the page.
- **Navigation Link**: Include a button that navigates to the Word Prediction Game page.

You can even use your About Me page for any purpose in the future. Therefore, ensure you allocate enough time to design your page in detail.

👾Game Page (Word Prediction Game) (70 points)

As the visitors click on the Word Prediction Game button on your homepage, they should be navigated to a new page where your game is hosted. The game details and the aspects you should implement carefully are given in the following items:

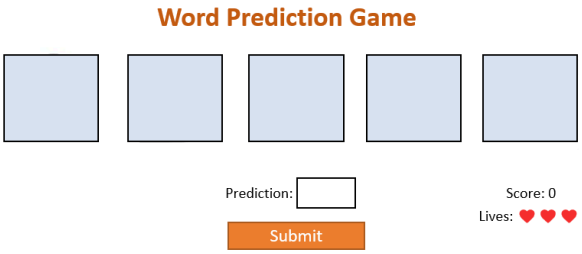
- **Game Objective**: Create a memory game where players click on cards in the sequence of the letters of a five-letter word. **The last digit of your student number determines the word you must use in your memory game.** If your student number's last digit is:
    - 0, the word is “ADIEU”.
    - 1, the word is “SYNTH”.
    - 2, the word is “STOCK”.
    - 3, the word is “NYMPH”.
    - 4, the word is “BLAST”.
    - 5, the word is “UNITY”.
    - 6, the word is “PRISM”.
    - 7, the word is “CHEST”.
    - 8, the word is “CLOUD”.
    - 9, the word is “BLINK”.

- **Initial Setup:**
    - Design **vector images** for each letter of your assigned word. You learned how to use *InkSpace* in vectorial drawings. You may use it to design your vector images for each word card shown in your game.

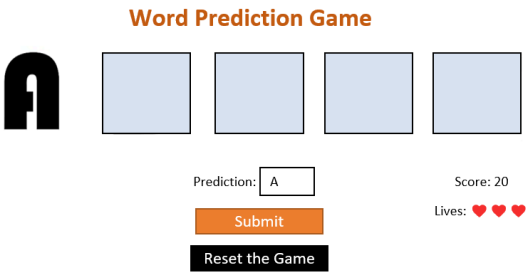
- Initially, hide the word you have implemented from the player so they can start guessing it.
- Include an **Input Tag** for the users to enter a word OR letter prediction.
- Include a **Button** to submit the predictions.
- Include Score and Lives details to inform the users during the game about the score they have earned and the remaining lives for the game.

A sample gameplay can be seen below:

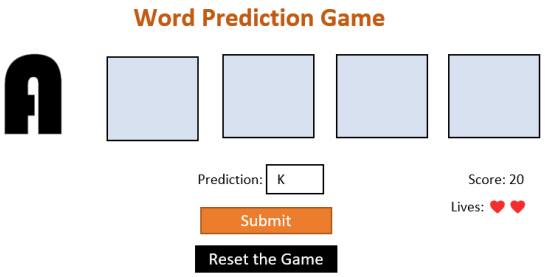
The user visits the webpage:



The user predicts the letter A:
This attempt gives the user 20 points and shows the letter A if it exists in the game.
A Reset the Game button should be shown as the game starts.



The user predicts the letter K:
The letter does not exist in the word; therefore, the user loses one of their lives.



The user attempts to make a full-word prediction:
The attempt is correct, and the user's score is now updated to 100. **Also, inform the user that they won the game by giving an alert.**

If they were to make a wrong prediction, the user would lose the game, and an alert would inform the user that they had lost.

After a game finishes, wait for the user to press the “Reset the Game” button to start a new game.

- **Scoring and Game Termination**:
  - Display the player's score on the page (for instance, as shown in the Gameplay figures), starting at zero. **Give 20 points for each correct attempt**.
  - Display the user’s lives. You may use a heart SVG image to make it more engaging. Each incorrect attempt at LETTER prediction will reduce the number of hearts by one. If the user mispredicts three letters, they lose the game with a loss alert. If the user incorrectly predicts a word (more than one letter), they lose the game immediately with a loss alert. Predicting a word correctly or predicting all the letters correctly ends the game with a win alert.

- **Game Interface:**
  Your game interface should at least include the following items:
  - Include a score display on the page.
  - Include a lives display on the page.
  - Include an input tag from which to receive the predictions.
  - Provide a **'Submit'** button to let the user send their prediction.
  - Also, add a **'Reset the Game'** button to let the user reset the whole game anytime.

- **Restarting the Game**:
  - As the game terminates, it should wait for the user to press the “**Reset the Game**” button. When they press it, **the game should be initialized from the beginning** (The score should be set to 0, the cards should be hidden, and the lives should be reset to three.)

NOTES:

- Use HTML, CSS, and JavaScript for website development.
- Regularly push your changes to GitHub and host the project on GitHub Pages. (**The progress in your GitHub repositories will be included in the evaluations.** Make sure that you **regularly work on your project and push the changes by explanatory commit messages**.)
- The final website should be hosted and fully functional.
- Interactions among individuals and the use of GPTs are prohibited! ❌🤖

SUBMISSION:

- Submit a single PDF file to Ninova before the deadline.
- This PDF file should contain:
    - Your full name
    - Your student ID
    - Your Github repository link
    - Your project's homepage link
- The date and the time of the submission will not be changed. Please be aware of the deadline.