**Technical Design Document Template**

**Name:** [Your Name]

**Date Created:** [Date]

**Program Description:**

[Provide a brief description of your program. Explain what the program does, its purpose, and any specific problem it solves.]

**Functions used in the Program (list in order as they are called):**

1. **Function Name:** [Name of the function]

**Description:** [Brief description of what the function does]

**Parameters:** [List and describe the parameters the function takes in]

**Variables:** [Name and description of the variables used in the function]

**Logical Steps:** [Describe the logical steps of your function]

**Returns:** [Describe what the function returns]

2. **Function Name:** [Name of the function]

**Description:** [Brief description of what the function does]

**Parameters:** [Name and type and describe the parameters the function takes in]

**Variables:** [Name and type and description of the variables used in the function]

**Logical Steps:** [Describe the logical steps of your function]

**Returns:** [Describe what the function returns]

3. [Add more functions as needed]

**Logical Steps:**

1. List the order in which your functions are called.

**Link to your repository:** www.yourrepository.com

**### Example Filled Template ###**

**Name:** Susan Melichar

**Date Created:** June 19, 2024

**Program Description:**

This program simulates a Magic 8 Ball, which is a fortune telling toy that displays a random response to a yes or no question.

**Functions used in the Program (list in order as they are called):**

1. **Function Name:** create\_response\_file (file)

**Description:** This function is responsible for detailing the list of outputs  
the 8ball could give the user and stores them into a newly created text file.

**Parameters:** file(file object) – file that the responses are written to

**Variables:**

1. responses(list) – used to hold the responses
2. responses\_file(file object) -file that the responses are listed in

**Logical Steps:**

1. Create a list that holds the responses. This is hardcoded.
2. Opens the file.
3. Create for loop to loop through the list and write each response to the file
4. Return the file.

**Returns:** responses\_file (file object): File with the responses written to it.

1. **Function Name:** magic\_8\_ball ()

**Description:** This function tells the user to ask a yes or no question and then displays a response for them.

**Parameters:** None

**Variables:**

1. responses\_file(file object) -file that the responses are listed in
2. question(string) – holds the question the user asks when prompted
3. response(string) – holds random response from file

**Logical Steps:**

1. Creates an empty file
2. Calls the create\_response\_file function
3. Prompts the user to ask a question
4. Get a random response from the file
5. Prints the random response to the user

**Returns:** None

**Logical Steps:**

1. Call the magic\_8\_ball function
2. The create\_response\_file is called within the magic\_8\_ball function

**Link to repository:** www.repository.com