

Magic Eight Ball

Bug Catchers



Ask your question...

Ask

Working Process

Friday: Short Meeting

Determine basic webpage structure.
Determine basic functions we want to achieve
a webpage an eight-ball
a user input box. Respond based on user input.



Friday Night: Basic Structure

Use AI tools (GPT-4, chatGPT, newBing)
Make the basic structure: Version One
Continue to use AI tools: Version Two



Saturday: Brainstorming

Based on Version Two:
Discuss the details. Determine the specific functions
and effect we want to achieve.
Task made and distribution.



Sunday and Monday

Combine everyone's work
Test the website. Do the final touches and touches.
Video and Slides made.

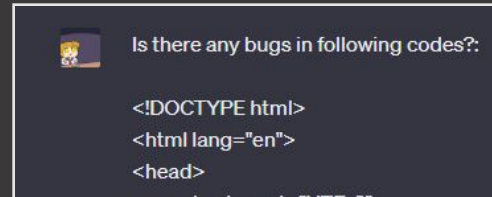
Test Process

Manually Test Extreme Input

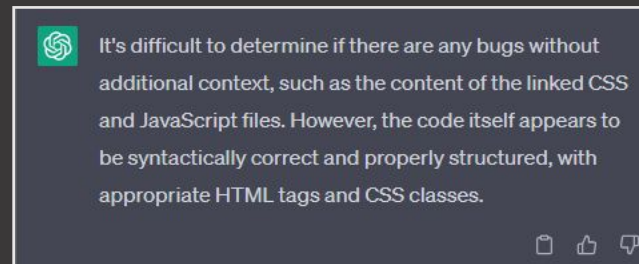
- **Input number: 1**
- **Input Chinese:** 锷斤拷
- **Input Very Large String:**
11111111111111111111111111111111
11111111111111111111111111111111
11111111111111111111111111111111
11111111111111111111111111...
- **Input Nothing:**
- **Input Special Char:** /
- **Input Special Word:** Null
- **Input Special Word:** NaN
-

Test with AI

Ask Ai with codes:



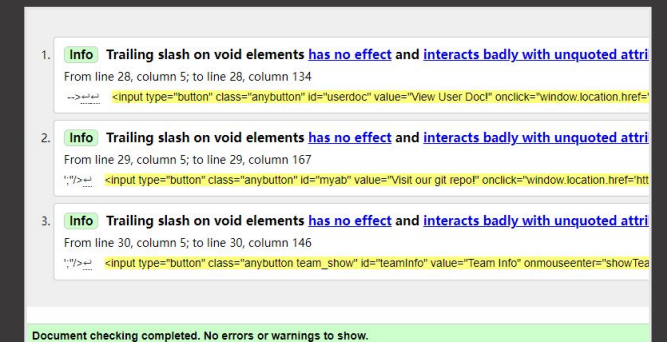
Got AI answer (This is just for an example):



Check in differ Client



Use validator w3c



What We Did with AI?

- ✓ Make the project basic structure
- ✓ Make pictures
- ✓ Add new special effects
- ✓ Add new functions
- ✓ Help us understand and read code
- ✓ Find bugs
- ✓ Fix bugs
- ✓ ...

What AI We Used?



ChatGPT



GPT-4



New Bing

AI Strengths and Weaknesses

Strengths

- ✓ Can quickly generate large pieces of highly readable and executable code (far beyond ordinary programmer)
- ✓ Very high accuracy for small pieces of code
- ✓ Ability to quickly and massively generate images
- ✓ Basic knowledge required is 0
- ✓ 24 hours standby
- ✓ no emotion, no fatigue
- ✓ The code can be modified at any time according to the needs of users

Weaknesses

- ✓ The "memory" is not strong, and the prompts that have been sent before may need to be sent repeatedly after a period of time.
- ✓ Cannot handle large programs or projects. Most of the currently public AIs do not have the ability to read so much code.
- ✓ The outputs(image/code) often contains bugs, and AI itself cannot actively deal with them.
- ✓ AI often fails to understand requirements correctly.
- ✓ Unable to handle complex requirements.
- ✓ It cannot handle multi-modal input (mostly ai).

How to Solve AI Problems?

Modularize The Project

- In our projects, we found it difficult to let the AI handle the whole project directly.
- However, we can modularize the project, for example: divide the magic eight ball into "handling the eight ball", "handling the basic layout of the web page", "beautifying the web page with special style" and so on.
- Divide the project into multiple small modules, and divide each module into a combination of multiple small functions.
- Let AI implement every small function.

Modularize The Requirements

- Divide the requirement description into sections and modularize.

How to Fix AI Bugs?

- For the bug code generated by AI, it can only be checked manually.
- But after checking the bug, you can submit the bug to AI for modification.

Use AI In Future Project

Quick Start

- Extremely fast project start-up speed. We can allow AI to implement the basic framework in a short period of time, thereby avoiding wasting a lot of time on basic programming.

Analysis code

- We can give a large piece of code directly to ai for analysis and let him explain the code to us.

Split Projects

- Divide the project into multiple parts and hand them over to each person for implementation. AI can be used in the process.

Modify The Code

- We can let ai merge and modify the code according to our needs.

Troubleshooting

- AI can be used to troubleshoot illogical errors in our code.