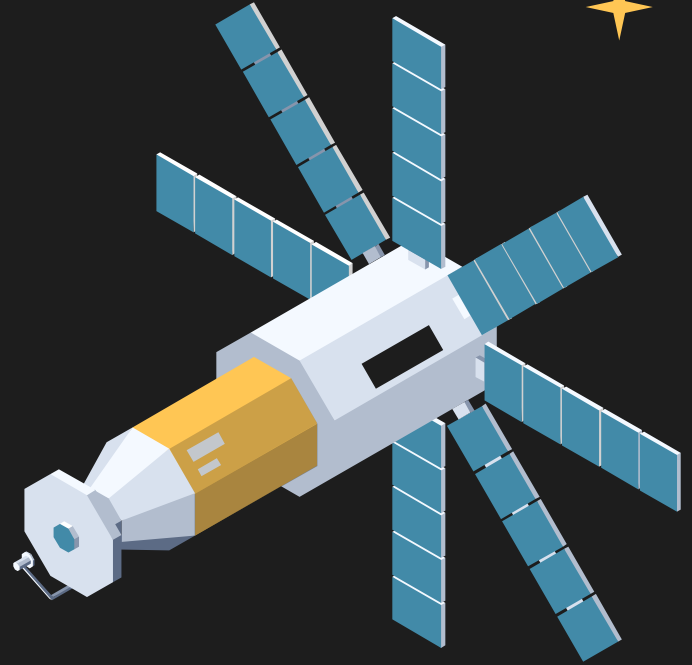


Apollo 18: 8-Ball Findings

By Team 18: Apollo 18



AI For Figma Designs



Builder.io

Uses ChatGPT to generate web designs on figma (paywall).

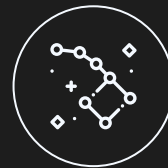
Locked behind a paywall (uses ChatGPT API keys)



Magestic

A text-to-icon generator that uses a prompt to generate custom icons

Generates a very specific art style (for the free plan). Not useful for web pages



Ando

Takes a simple drawing and a prompt and renders beautiful 3D models

Not good for designing web pages, but good to create super realistic designs

More AI for Designing



Visily

Works as a normal design tool. Can turn screenshots into mockups

Has a collab feature, is useful for going off a pre-made website



Builder.io

Also has webpage to figma and code export features

Code export is finicky and clunky, but webpage to figma feature works pretty well (better than Visily's)



Clapy

Generates React or Angular code from Figma.

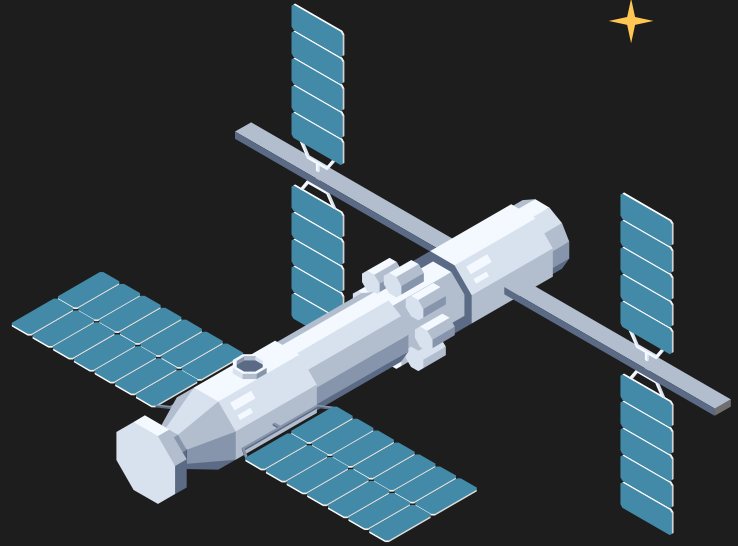
No option for vanilla JS, HTML, CSS. Code is super clunky, terrible at resizing.



AI Design Comments

A single prompt-to-design AI seems to be hard to find

- ★ ChatGPT can be used for ideation
- ★ Builder.io can be used to modify designs
- ★ Can export code from figma via Builder.io



HTML/CSS/JS Generation



Generative AI services are able to write valid code

- Experiment with ChatGPT, Ghost writer and Amazon CodeWhisperer; All services generate valid HTML/CSS/JS code of a fortune telling app
- ChatGPT, Ghost writer generate the whole files all at once after receiving user input
- Amazon CodeWhisperer code the entire function and logical code blocks at a time based on user comments



HTML/CSS/JS Generation Cont.



Limitations of AI

- Many of the AI services are not free after initial trials):
- GitHub Copilot
 - Pros: Integrates seamlessly with popular code editors; various language support; Recognize context of code you write; free; easy-to-use web interface; no coding skills required; high-quality code generation and solutions
 - Cons: not designed for non-coding tasks like data generation or natural language generation;
- GhostWriter
 - Pros: collaboration with team in real-time; access code from any device with internet; a library of pre-built templates and snippets; AI-assisted coding suggests code completions
 - Cons: limited customization options and a lack of advanced features for experienced developers
- CodeWhisperer
 - Pros: caters first to development use cases associated with Amazon platforms
 - Cons: supports many fewer programming languages and IDEs



HTML/CSS/JS Generation Cont.



Findings Upon Generating Our Code (used GPT3):

- HTML code was concise, easy to build on/edit
- JS file had minor errors (required a ?, repeated the question with a second question mark)
 - Used RegEx to make sure the question was phrased correctly
- Pros:
 - will ask user to phrase it as a yes/no question if user didn't
 - overall made it work
- Cons:
 - allows for random phrasing (will respond to question "Is was?")
 - lacks documentation (had to separately prompt it)
 - Code for animating did not work



Audio Generation



Amazon Polly

Fast generation of text-to-speech audio. Uses deep learning technologies to synthesize natural-sounding human speech. Supports bilingual synthesization.



Speechify

Great UI/UX design. User friendly. Converts docs, articles, PDFs, email to audio.

Image Generation



Mainly used Craiyon

Pros: Met most of the conditions we asked. Image generation was pretty fast

Cons: Quality concerns. Some generated images were completely different from what was asked.

We decided not to use any AI generated images in our website since it was much easier to find a better version through a google search

