

**Guidelines**

This is it! The final project is the pinnacle of Code in Place. This is an opportunity for you to use the skills you've learned to create something that is meaningful to you!  
  
Your project could be small and humble or big and expansive. Both are great. All that we care about is that you make one thing that is yours. Examples of great projects could be: a word game on the console, a new graphics program that does something beautiful or fun.

Please ask for help on the Forum if you have trouble (1) deciding on a good project, (2) getting started, (3) conceptual challenges. We are all one big team and we want to support one another.

**Final Project Showcase**

In celebration of all that you've learned, we will be creating a Final Project Showcase as a public gallery of your final projects. If you'd like to see what this will be like, check out our previous galleries:

* [CIP 4 (2024) showcase](https://codeinplace.stanford.edu/2024/showcase/)
* [CIP 3 (2023) showcase](https://codeinplace.stanford.edu/2023/showcase/)
* [CIP 2 (2021) showcase](https://codeinplace-2021.netlify.app/2021/showcase/)
* [CIP 1 (2020) showcase](https://compedu.stanford.edu/codeinplace/public/)

We’ll be publishing the project showcase shortly after the goal deadline, so we’d recommend submitting your project before then. If you want to make changes or submit later, you’ll be able to do so until the end of June, and the showcase will be updated periodically.

You don't need to pre-specify a project as your "final project" until submission. To get started, simply head over to the [Code page](https://codeinplace.stanford.edu/cip5/code) and create a new custom project using one of these buttons:

A screen shot of a computer

AI-generated content may be incorrect.

*This is a screenshot of the buttons you can use to create a final project.*

**Submission**

Your final deliverables are the following:

* Your project's title.
* An image you want to use for your thumbnail.
* Your project's description.
* Your project's published link.
  + If you created your project in the Code in Place IDE, submit the URL for your shared project.
  + If you created your project in an offline IDE, please upload your project to [GitHub](https://github.com/) and submit the URL to your project's GitHub repository.
* Your project's YouTube link (optional).
  + If you want to create a YouTube video demonstrating your project, submit the URL to the video. The URL must be a YouTube link. We highly recommend you submit a video to make your project stand out!
  + Your video should demonstrate your project running in action. You can supplement with screenshots, slides, voiceover narration, and/or a face cam if you wish.
  + See [this link](https://www.howtogeek.com/205742/how-to-record-your-windows-mac-linux-android-or-ios-screen/) for tips on how to record your PC, Mac, or mobile device's screen. You can also record MP4 video files using a free Zoom account and sharing your screen.
  + See [this link](https://support.google.com/youtube/answer/57407) for instructions on how to upload your local video file to YouTube. You can set your uploaded video as "Public" or "Unlisted", but don't set it to "Private".

**Pease submit your project** [**here**](https://codeinplace.stanford.edu/cip5/handout/submitfinalproject)**.**

**Project Idea Brainstorming**

To help you brainstorm ideas for your project, we've created an AI tool that will help guide your idea generation journey. To get started, go to the [project brainstorming tool](https://codeinplace.stanford.edu/cip5/finalProjectProposal/).

A screenshot of a phone

AI-generated content may be incorrect.

*This is a screenshot of the brainstorming tool.*

**Standard Projects**

We strongly encourage you to invent your own project, even if it is simple. If you have trouble coming up with your own, here are a few standard projects that are also standard assignments from the second half of CS106A.

**Breakout!**

Write the classic Atari arcade game of Breakout!  
[IDE Project for Breakout](https://codeinplace.stanford.edu/cip5/ide/a/breakout)

You'll use animation to draw a bouncing ball, use your mouse to control the player's paddle movements, and utilize collision detection.

A screenshot of a computer screen

AI-generated content may be incorrect.

**Word Guessing Game**

Write a program that has the user play a word guessing game.   
[IDE Project for Word Guessing](https://codeinplace.stanford.edu/cip5/ide/a/wordguessing)

You'll use variables, strings, lists, and file reading.  
Here is an example where the player tries to guess a secret word one letter at a time:

The word now looks like this: -----

You have 8 guesses left

Type a single letter here, then press enter: a

That guess is correct.

The word now looks like this: -A---

**Baby Snake**

Write the Baby Snake game!  
[IDE Project for Baby Snake](https://codeinplace.stanford.edu/cip5/ide/a/babysnake)  
  
You'll use animation, handle key presses to move the player, utilize collision detection, and update the game state every time the player successfully moves to the goal or crashes into a wall.

A white square with red and blue squares

AI-generated content may be incorrect.

**"Bajillion" Search Engine**

Write a program that implements the functionality of a search engine.   
[CS106A Handout for Search Engine](https://web.stanford.edu/class/cs106a/#/assn6)   
  
Uses all concepts (except images). This is the final project for CS106A. You will need to do this project using an offline IDE such as PyCharm or Visual Studio Code.

Here is an example output of the program running some queries on sample BBC News data:

A screenshot of a computer program

AI-generated content may be incorrect.

**Infinite Story**

Write a choose-your-own-adventure game that harnesses the power of generative AI.  
[IDE Project for Infinite Story](https://codeinplace.stanford.edu/cip5/ide/a/infinite-story)

You will get to apply the knowledge you have learned about dictionaries and combine that with making requests to ChatGPT to ultimately help guide your user through a mystical adventure. In the end, you will think about the ethical implications underlying the use of generative AI in storytelling applications.