Code in Place

CS49

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VICE PROVOST FOR DIGITAL EDUCATION
STANFORD UNIVERSITY

SARAH KHAN
CODE IN PLACE SECTION LEAD
FOOTHILL COLLEGE

AGENDA

1. What is Code in Place?
2. Code in Place Comes to Foothill College
3. Section Leaders
4. Section is in Session!

CiP OVERVIEW

Remote Python Programming

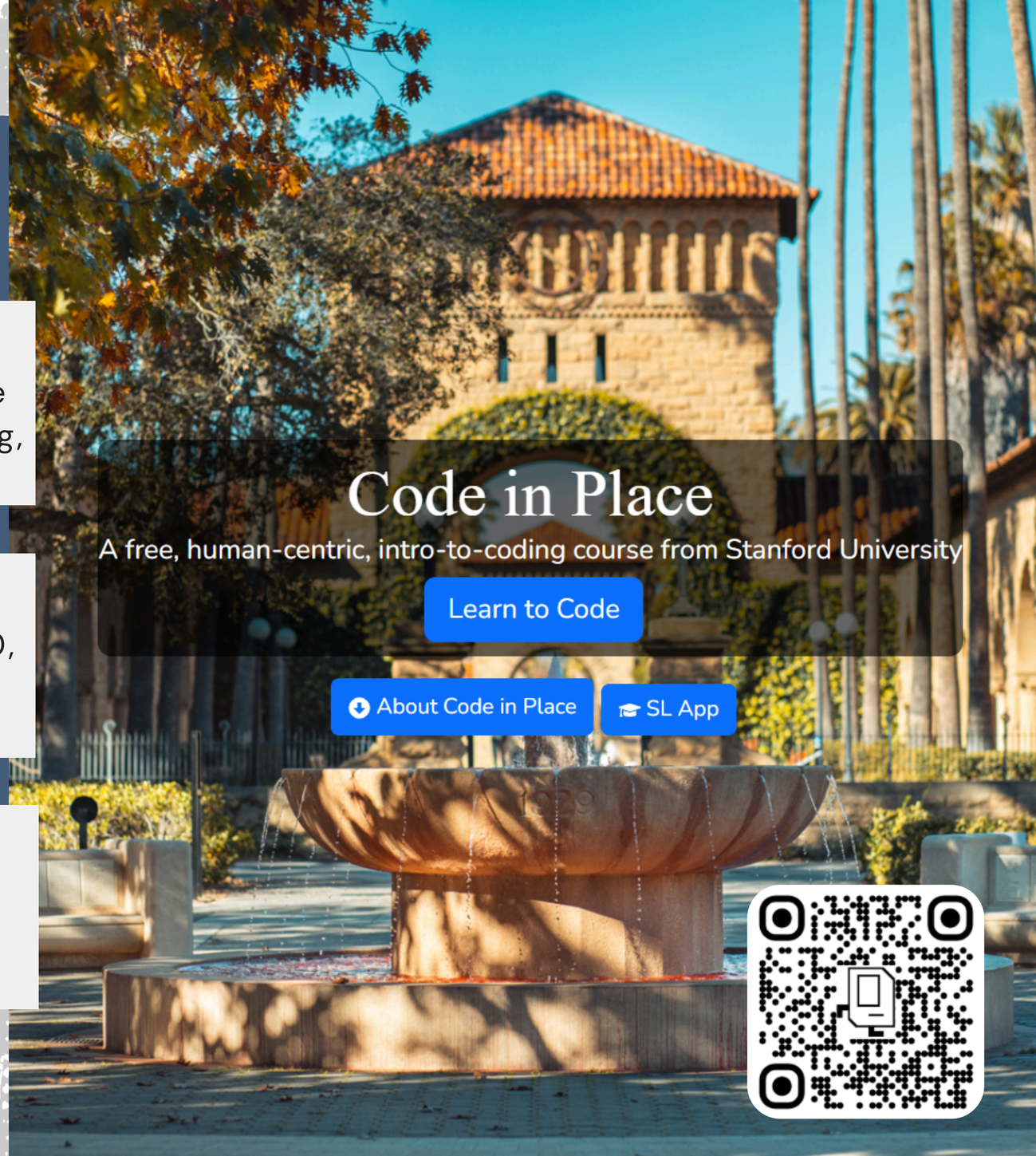
Stanford's Code in Place is a free online course offering an introduction to Python programming, covering the first half of Stanford's CS106A.

Scalable Education Model

With over 30,000 students globally since 2020, the program combines recorded lectures and guided learning sections.

Human-Centered Approach

Sections led by volunteer instructors ensure personalized guidance and enhanced engagement.



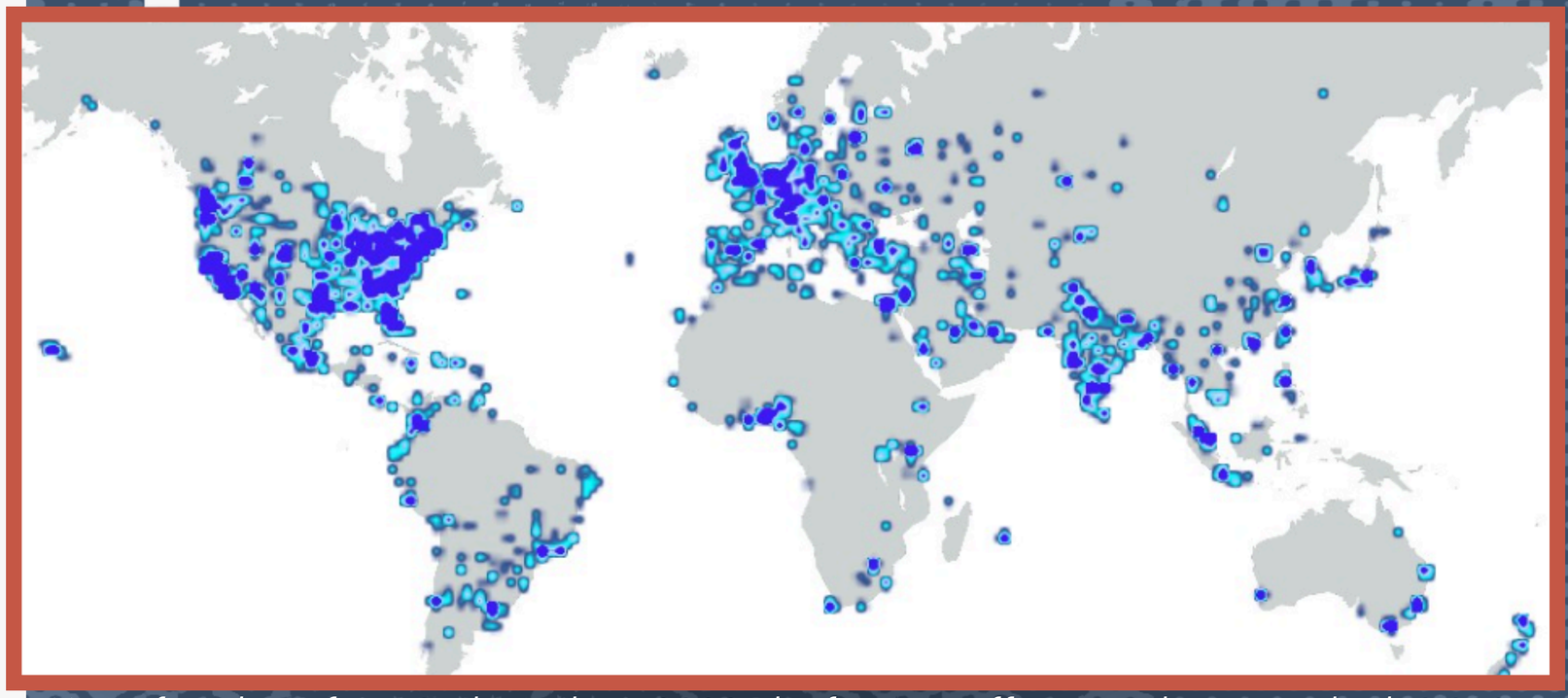
PAST OFFERINGS

3,000
section leaders teach

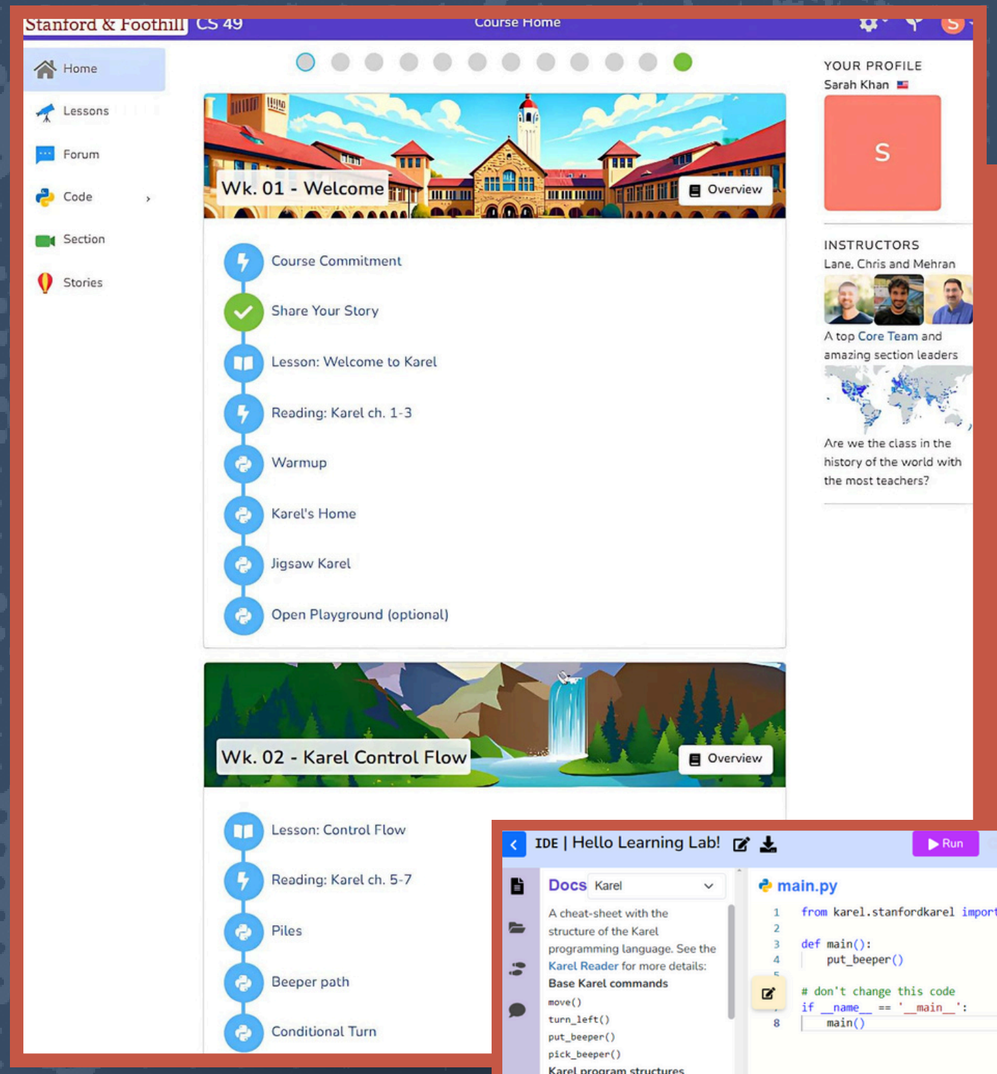
30,000
students

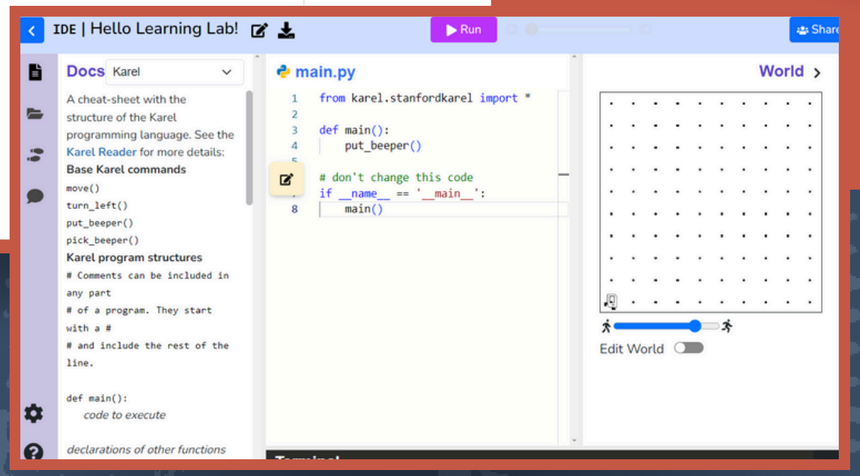
1:10
student to section leader ratio

1/2
of Stanford's CS106A



Map of students from Code in Place 2020, the first two offerings. The course had 10,000 students in the first offering and 12,000 in the second





Feature Rich

The platform provides ample modularity with fast tailored feature releases.

Easy to Navigate

User Interface provides clear curriculum sequence and easy access to core course components.

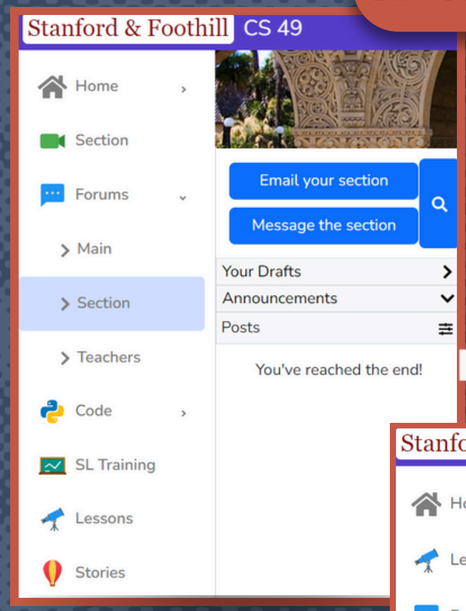
Embedded Coding Environment

Students quickly begin coding without the pain point of environment and language installation.

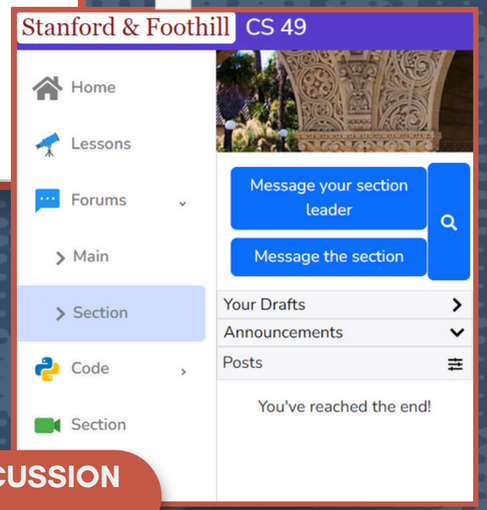
PLATFORM

COMMUNITY

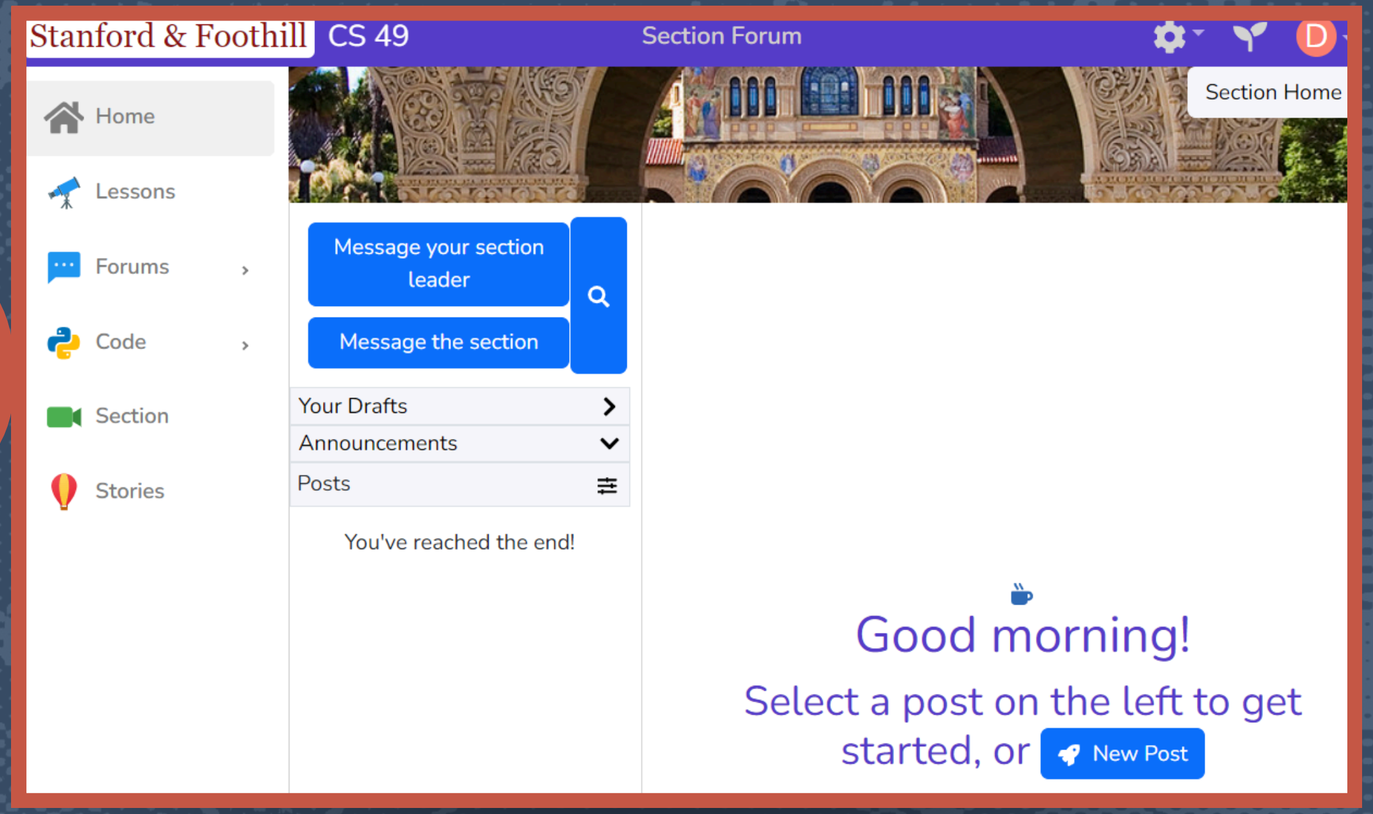
SL DISCUSSION VIEW



AI help bots are also in the works for support when teaching staff is unavailable!



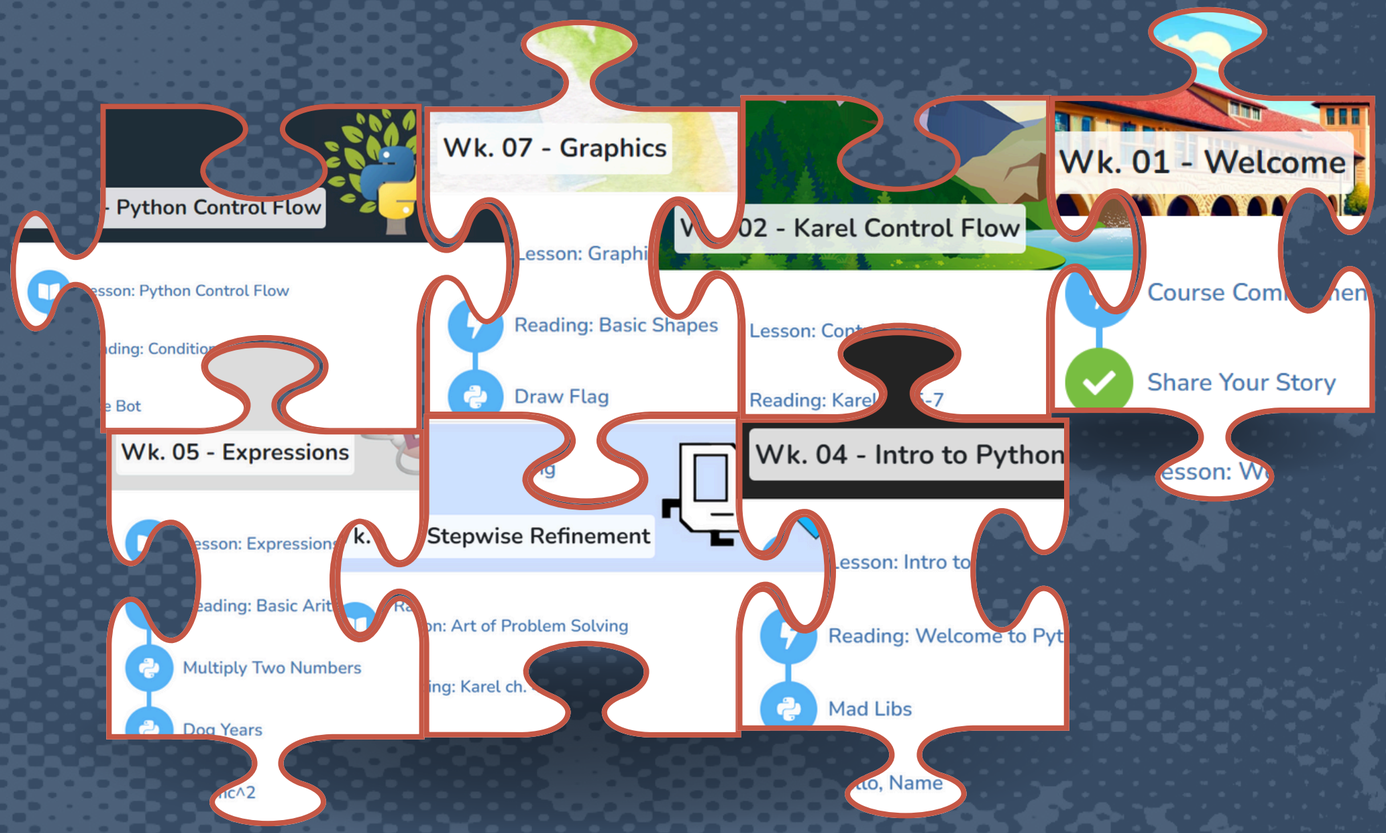
STUDENT DISCUSSION VIEW



Discussion Rich

Discussion forums facilitate teaching team engagement among each other and with students. Section leads share resources and ongoing collaboration.

MODULARITY



Out of the Box

The standard Code in Place is also ready to use right out of the box, covering the first half of Stanford's CS106A.

Flexibility

Curriculum modules are customizable and easily integrate existing curriculum and course materials.

README GPL-3.0 license

Code in Place 2023 and Karel Solutions

Code in Place is an act of community service over 900 teachers from ar
offer a first-of-its-kind volunteer-led course called Code in Place, h
Code in Place was a great, uplifting, learning experience and over 10,
in Python.

README

✔ If you think this repository has helped you learn something new yo
✘ If not, point out 'why' and spam the issue section

Contributing

Any kind of contributions to `Trilochna/Code-In-Place-By-Stanford-University` are welcome. While creating an issue(for this project) use `Request-Feature` Label.

1. Fork the Project
2. Commit your Changes
3. Open a Pull Request

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Trilochna / Code-In-Place-By-Stanford-University Public

Notifications Fork 1 Star 6

Code Issues Pull requests Actions Projects Security Insights

main 1 Branch 0 Tags Go to file Code

Trilochna Update README.md d188a22 · last year 174 Commits

2023 Karel	Update README.md	last year
Add Many Numbers	Update README.md	last year
Averages	Update README.md	last year
Baby Snake	Update README.md	last year
Bouncing Ball	Update README.md	last year
Carbon Dating	Update README.md	last year
Centered Square	Update README.md	last year
Chess Board	Update README.md	last year
Code In Place Resources	Add files via upload	last year
Count Nums	Create README.md	last year

About

Karel Codes

python graphics stanford-university standard karel karelthebot karel-python code-in-place codeinplace code-in-place-2023 code-in-place-2023-solutions karel-solutions

Readme
GPL-3.0 license
Activity
6 stars
1 watching
1 fork
Report repository

Releases

No releases published

OPEN SOURCE

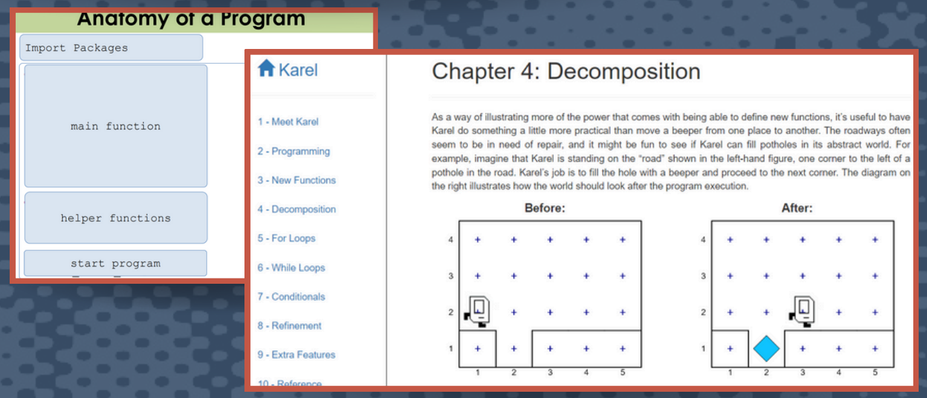
GitHub Repo

Out of the Box Code in Place is available for free via GitHub. Clone it and play around!

REMOTE + COLLABORATION

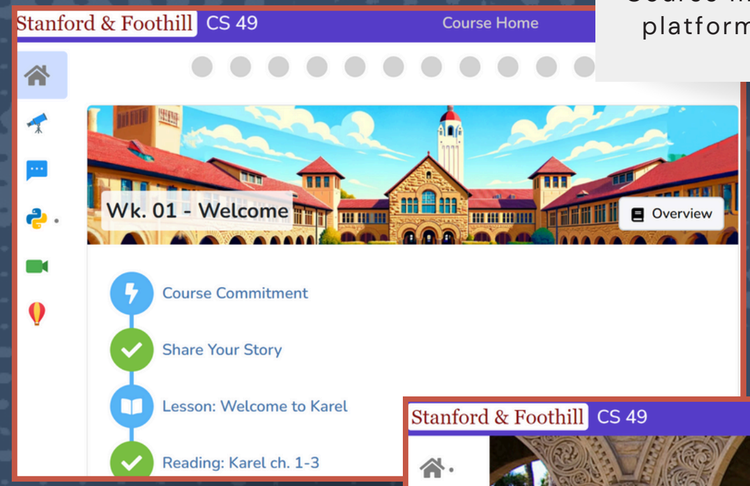
Content

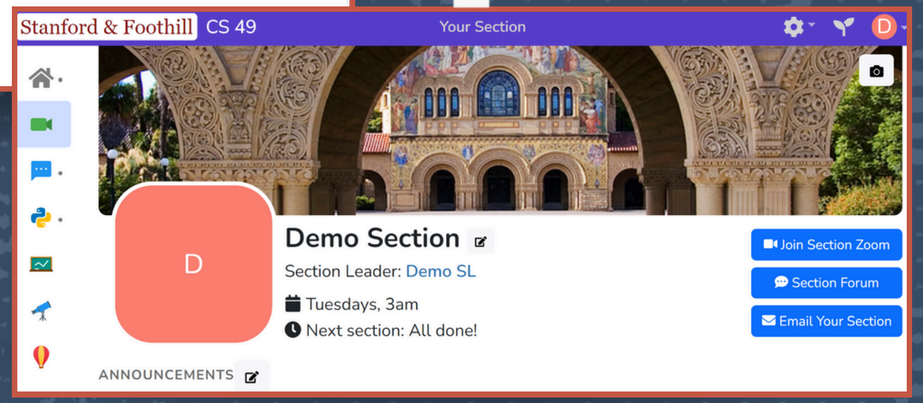
CiP provides complete lessons with video lectures paired with course textbook all in one place.

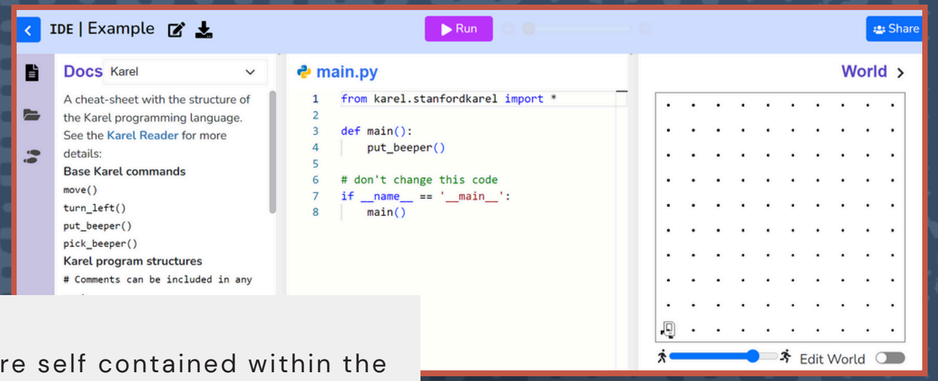


Delivery Mechnanism

Course materials are self contained within the platform serving as a self-contained learning experience.







Exercise Rich

Course materials are self contained within the platform serving as a self-contained learning experience.

Online Learning + Human Contact

The flexibility of a MOOC, with a human touch. Weekly sections give students learning support in small collaborative groups.

AGENDA

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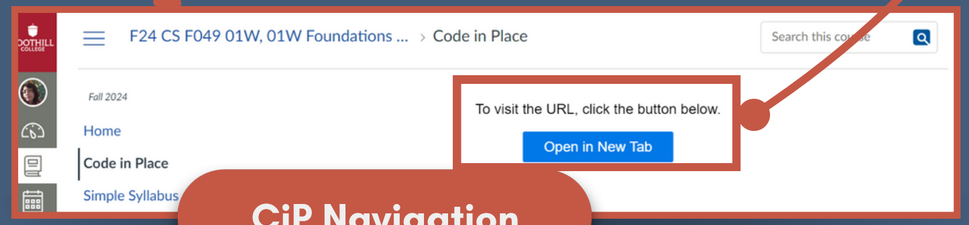
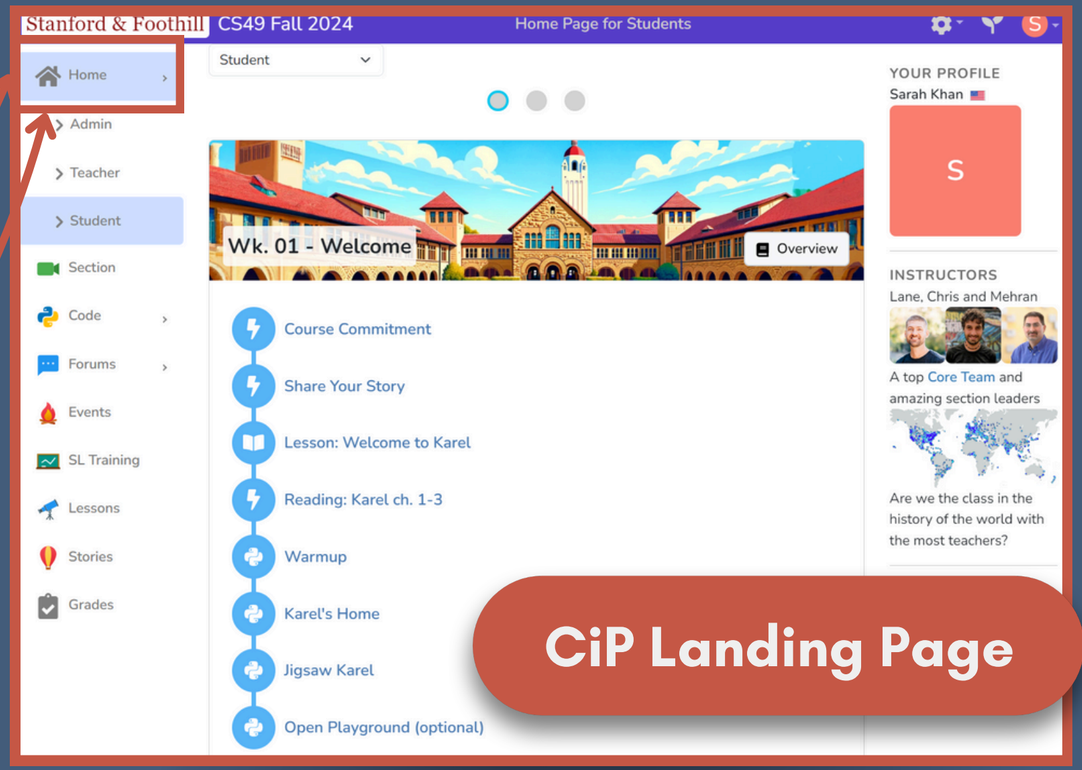
CANVAS INTEGRATION

COURSE HOMEPAGE

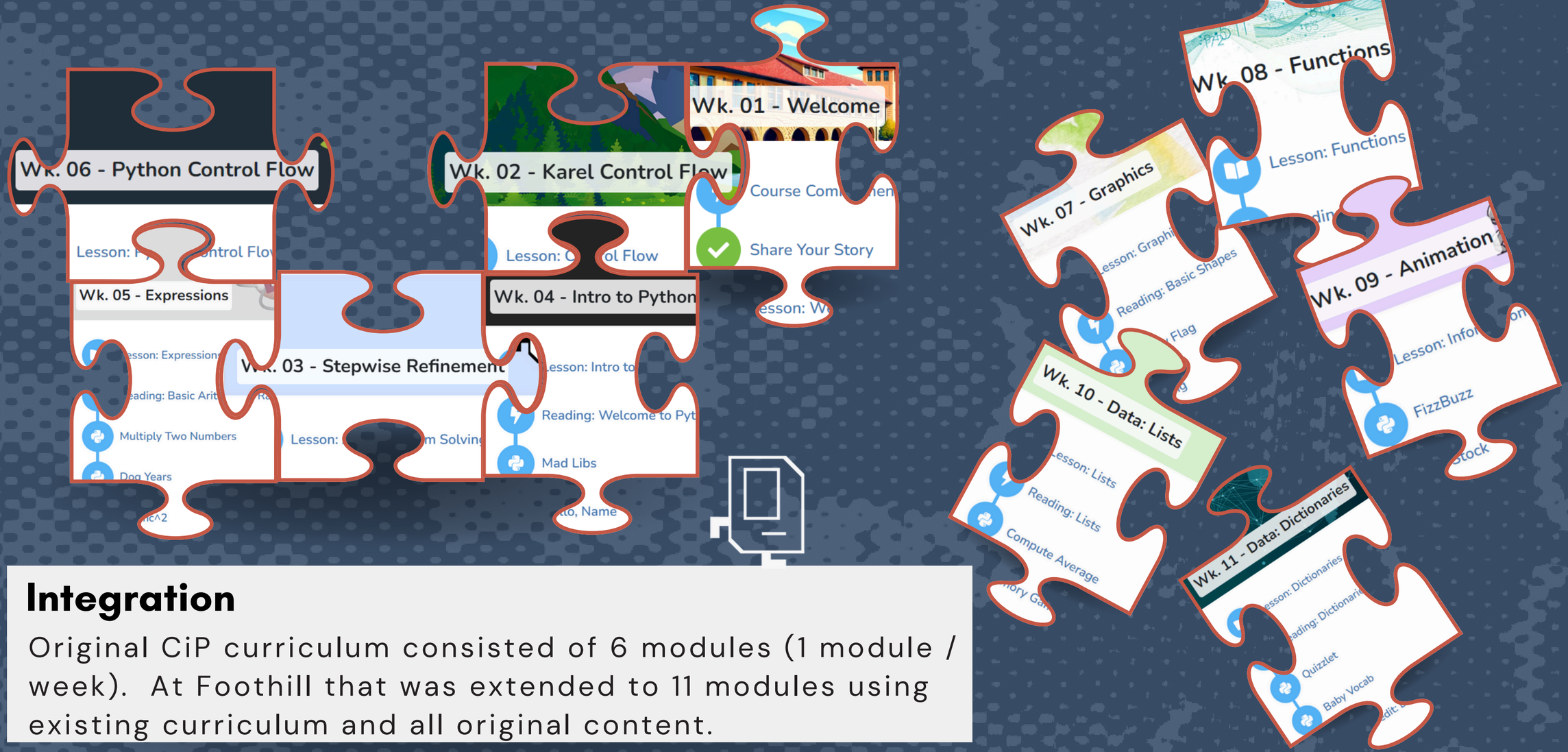


CiP Navigation



CiP Landing Page

CUSTOMIZED CURRICULUM



Integration

Original CiP curriculum consisted of 6 modules (1 module / week). At Foothill that was extended to 11 modules using existing curriculum and all original content.

CURRICULUM

1

Wk. 01 - Welcome

Overview

- Course Commitment
- Share Your Story
- Lesson: Welcome to Karel
- Reading: Karel ch. 1-3
- Warmup
- Karel's Home
- Jigsaw Karel
- Open Playground (optional)

2

Wk. 02 - Karel Control Flow

Overview

- Lesson: Control Flow
- Reading: Karel ch. 5-7
- Piles
- Beeper path
- Conditional Turn

3

Wk. 03 - Stepwise Refinement

Overview

- Lesson: Art of Problem Solving
- Reading: Karel ch. 4 & 8
- Stone Mason Karel
- Fill Karel
- Extra Credit: Midpoint Karel
- Create Your Own Karel Challenge (credited toward final project)

4

Wk. 04 - Intro to Python

Overview

- Lesson: Intro to Python
- Reading: Welcome to Python, Print, User Input
- Mad Libs
- Hello, Name
- Agreement Bot
- How Old Are They?

5

Wk. 05 - Expressions

Overview

- Lesson: Expressions
- Reading: Basic Arithmetic, Random, Advanced Arithmetic
- Multiply Two Numbers
- Dog Years
- E = mc^2
- N-Sided Dice
- Weighted Coin

6

Wk. 06 - Python Control Flow

Overview

- Lesson: Python Control Flow
- Reading: Conditionals, Loops
- Joke Bot
- 10 Random
- Liftoff
- Double It
- Khansole Academy
- Extra Credit: Game of Nimm
- Create Your Own Console Challenge (credited toward final project)

7

Wk. 07 - Graphics

Overview

- Lesson: Graphics
- Reading: Basic Shapes
- Draw Flag
- Ring
- Box Row
- Optical Illusion
- Extra Credit: Pyramid

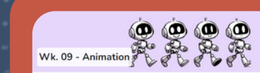
8

Wk. 08 - Functions

Overview

- Lesson: Functions
- Reading: Anatomy of a Function, Scope, Parameters
- Get Name
- Print Ones Digit
- Print Divisor
- Chaotic Counting
- Quilt

9



Wk. 09 - Animation

Overview

- Lesson: Information Flow
- FizzBuzz
- In Stock
- Lesson: Animation
- Reading: Animation
- Baby Snake
- Follow Me
- Create Your Own Graphics Challenge (credited toward final project)

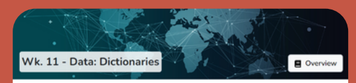
10

Wk. 10 - Data: Lists

Overview

- Lesson: Lists
- Reading: Lists
- Compute Average
- Memory Game

11



Wk. 11 - Data: Dictionaries

Overview

- Lesson: Dictionaries
- Reading: Dictionaries
- Quizzlet
- Baby Vocab
- Extra Credit: Breakout
- Create Your Own Final Project

12

Wk. 12 - That's a Wrap!

Overview

FOOTHILL COLLEGE

CiP for Credit

For-credit CiP is still in its early days, but there has been ample support and ongoing collaboration making it an ever growing course.

FOOTHILL COLLEGE

CALIFORNIA COMMUNITY COLLEGES

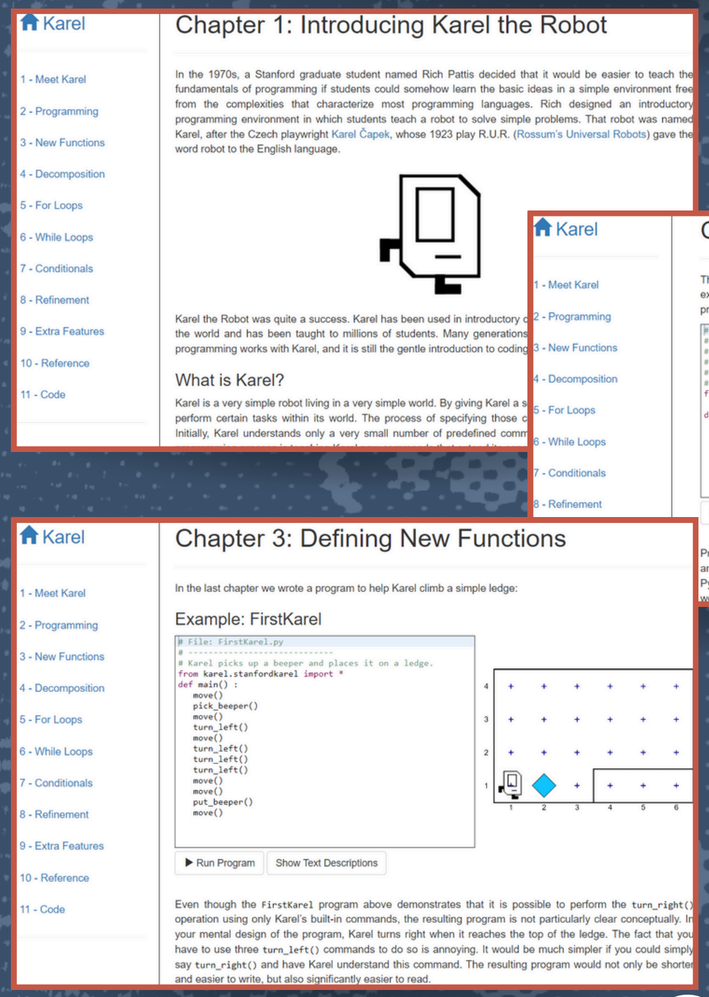
Innovation

“It’s really fun to see into the development side of things and watch visions and aspirations come to life, and especially with such a shared vision of serving our students in mind.”

TRAILBLAZING

Content Integration

CiP's existing content provides a solid, well-rounded foundation that's ready to expand seamlessly to meet any curriculum requirements.



CONTENT

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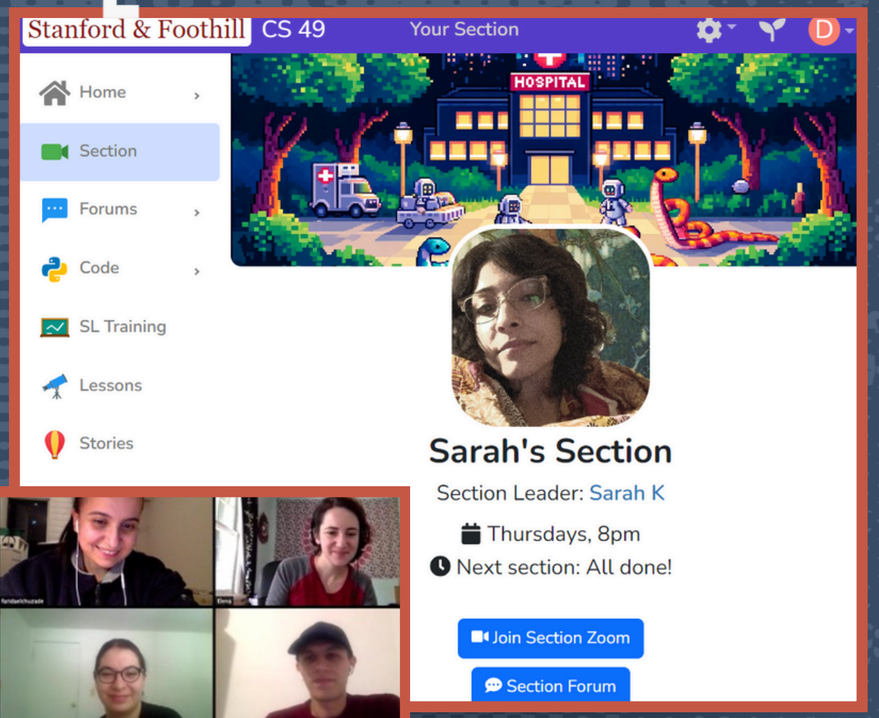
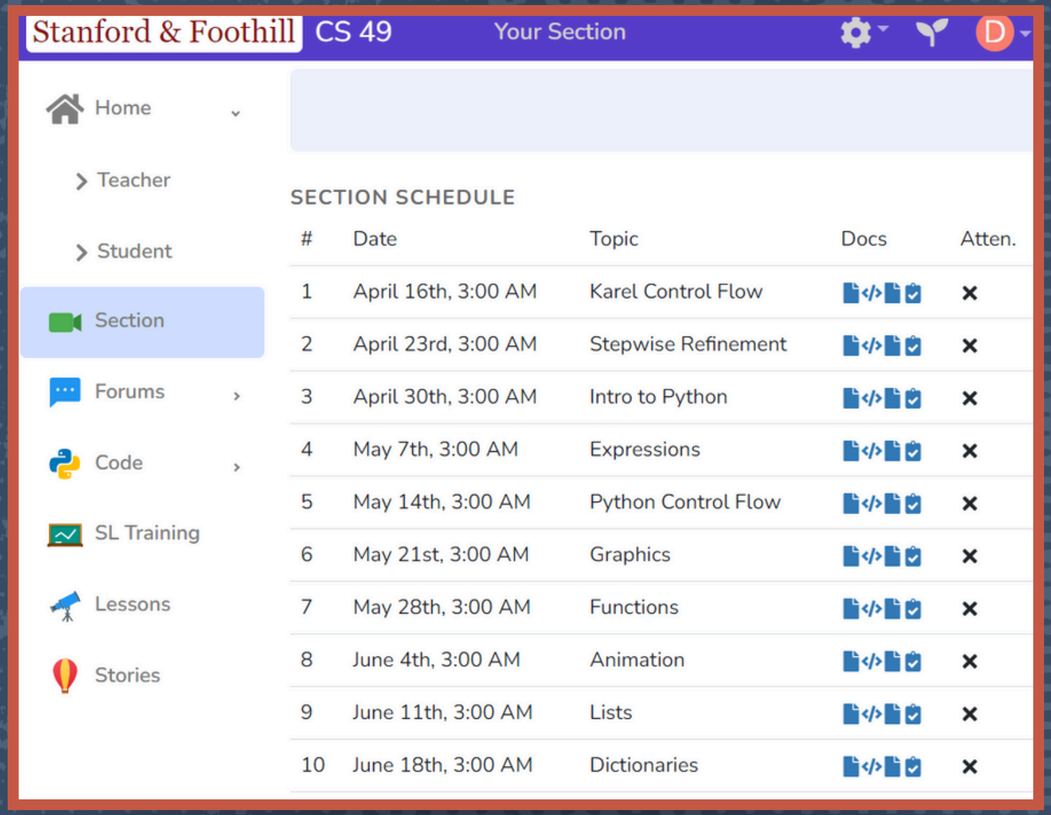
WHAT ARE SECTION LEADERS?



Diversity

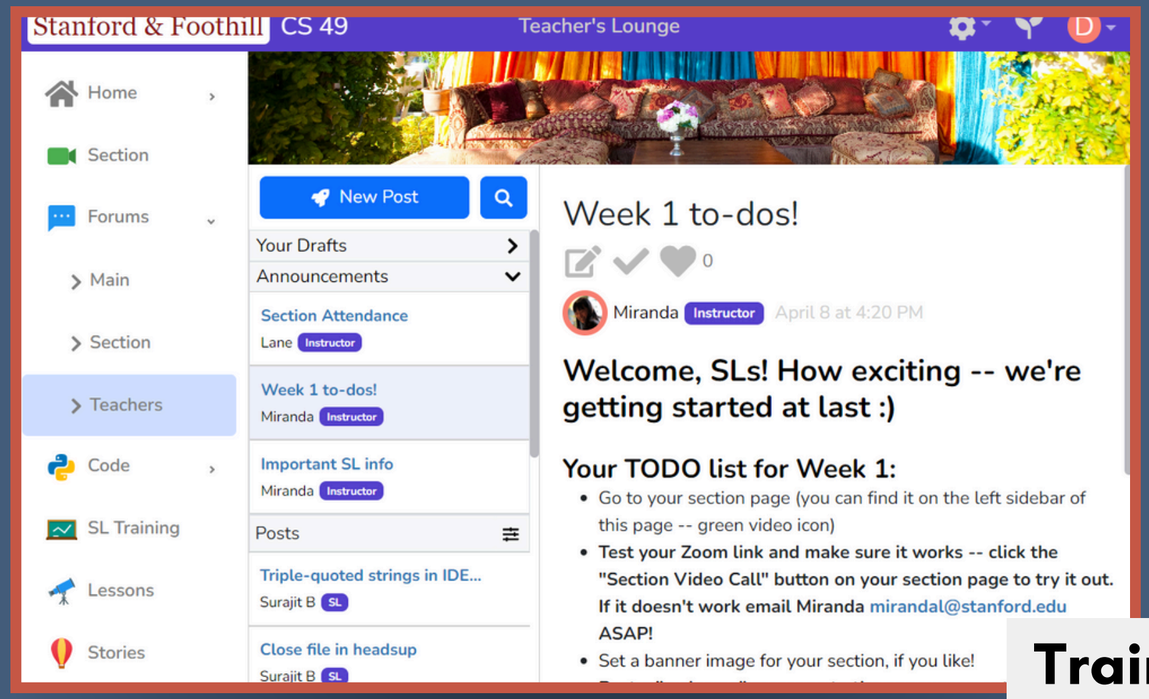
Section leaders come from diverse backgrounds with a shared mentality centered on helping guide students into the world of programming.

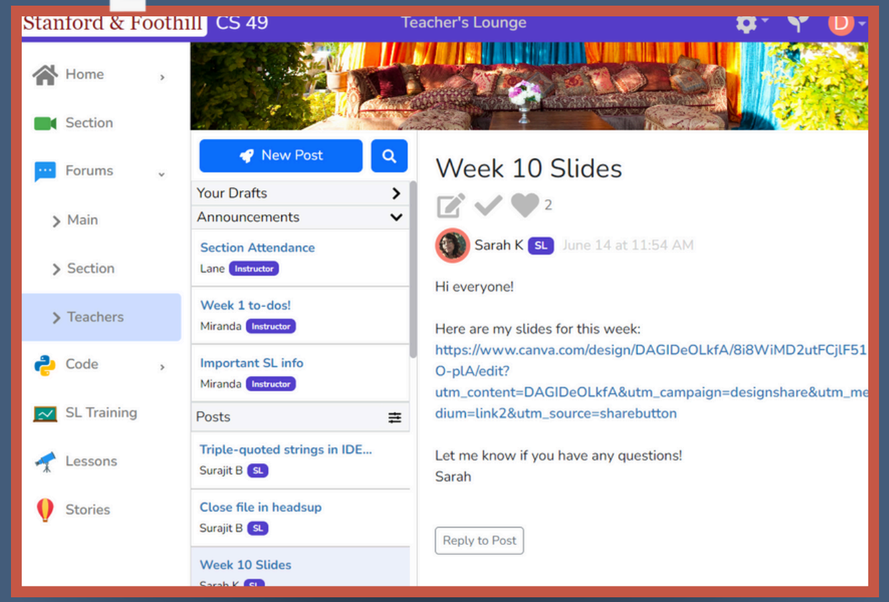


Ever Expanding

CiP built from the ground up with 5 section leaders at the start, to 3000 section leaders now.

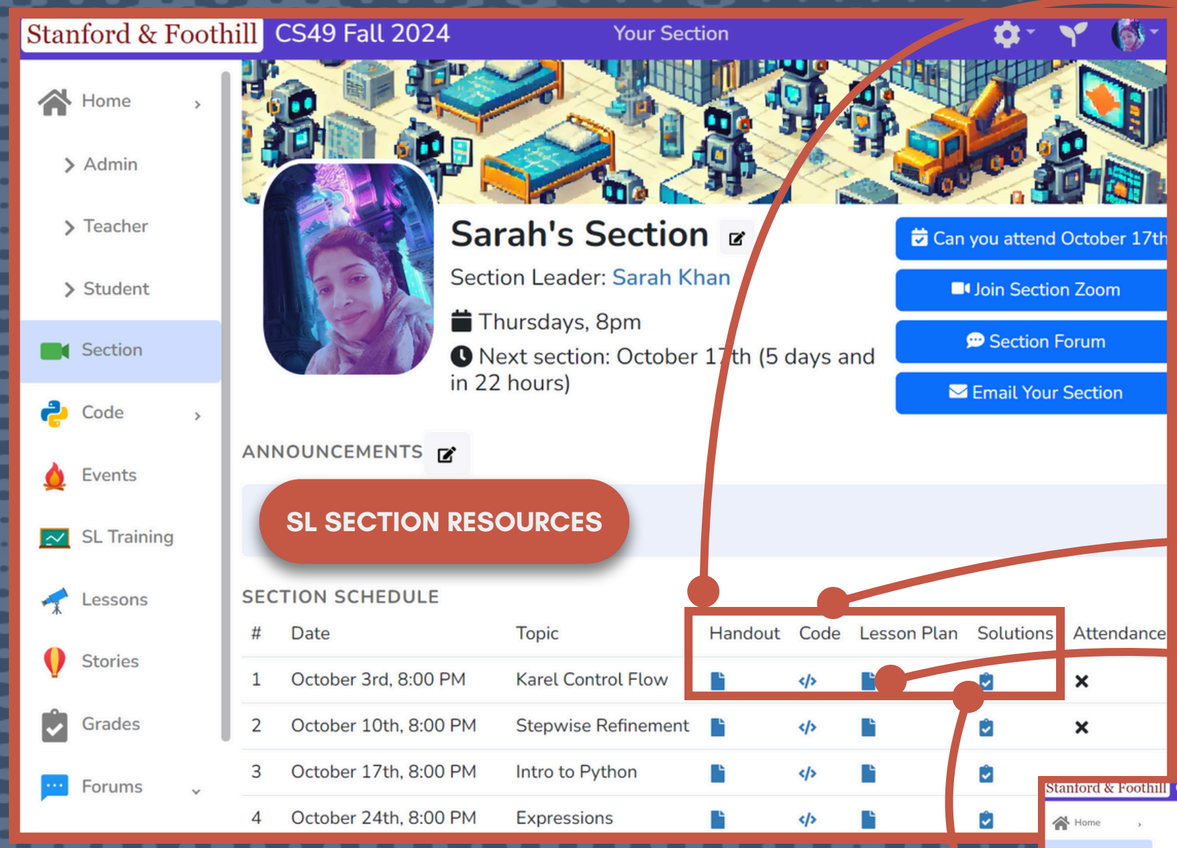
COLLABORATION



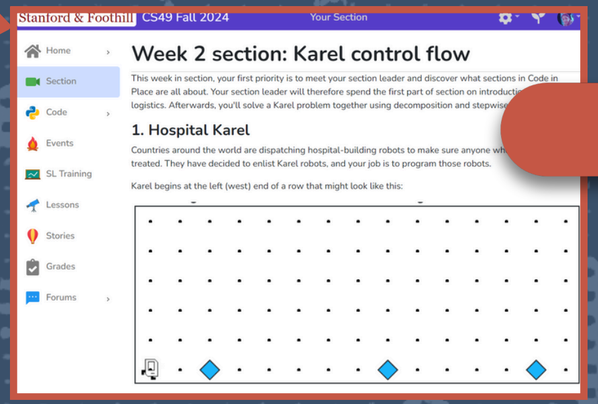


Training + Support + Learning Model

Section leaders meet weekly to discuss that week's modules with teaching team. CiP platform has a dedicated discussion area for section leaders and teachers as well.

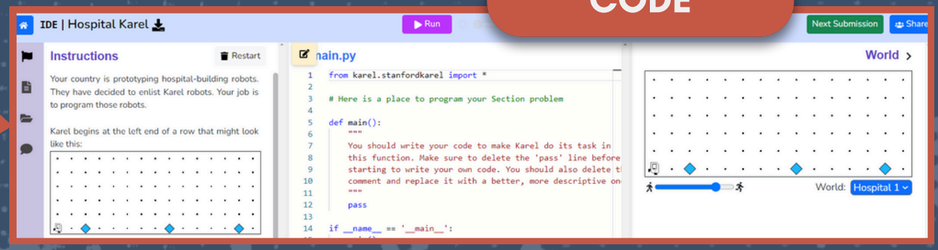


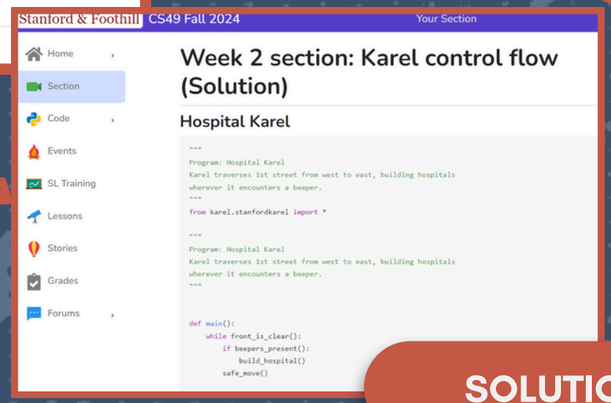
SL SECTION RESOURCES



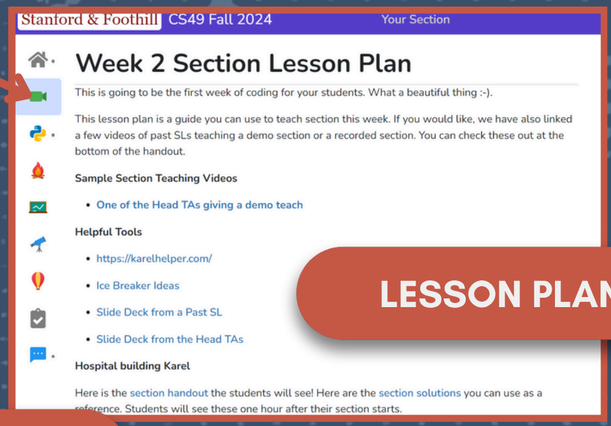
HANDOUT

CODE





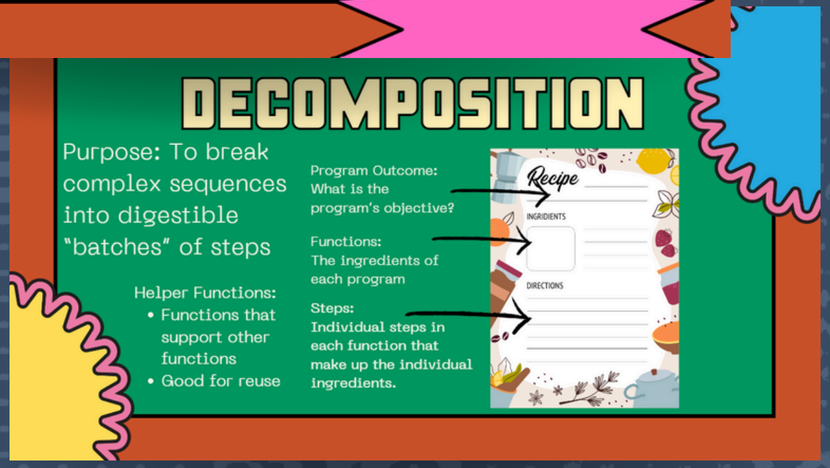
SOLUTIONS

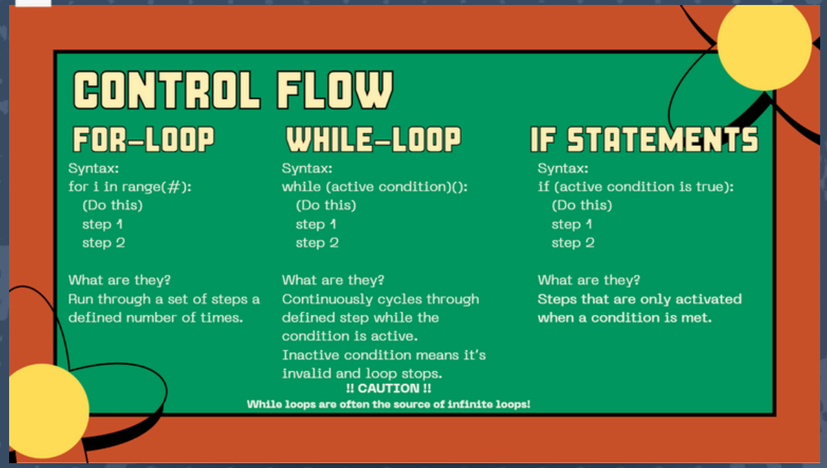


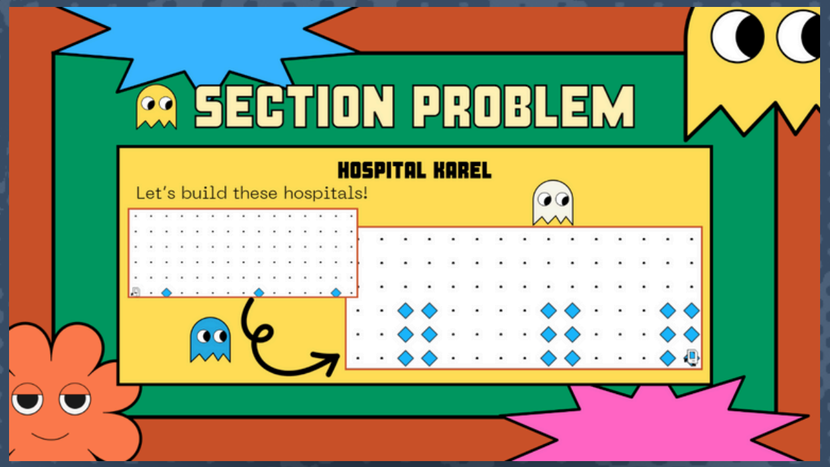
LESSON PLAN

SL CONTENT

FLEXIBILITY







Fun Environment

Section content follow CiP lesson plans, but are flexible to section leader teaching styles and provide a fun programming environment and challenges.

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THANK YOU!

CONTACT US

Interest Form

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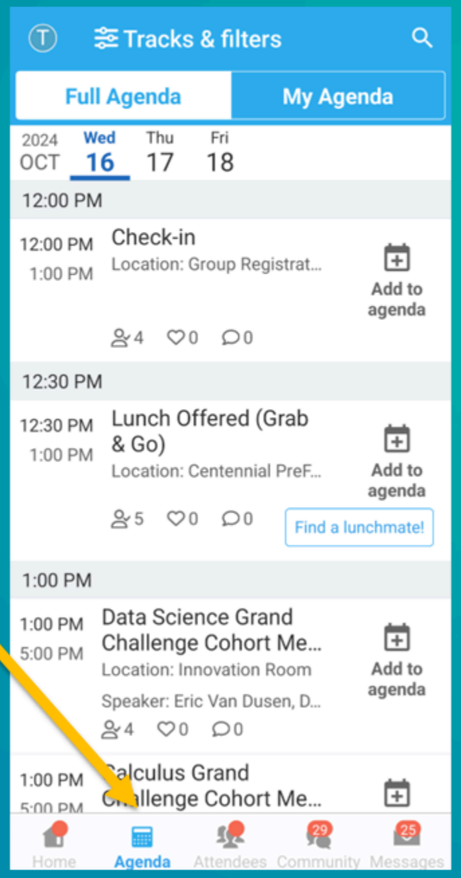
Code in Place

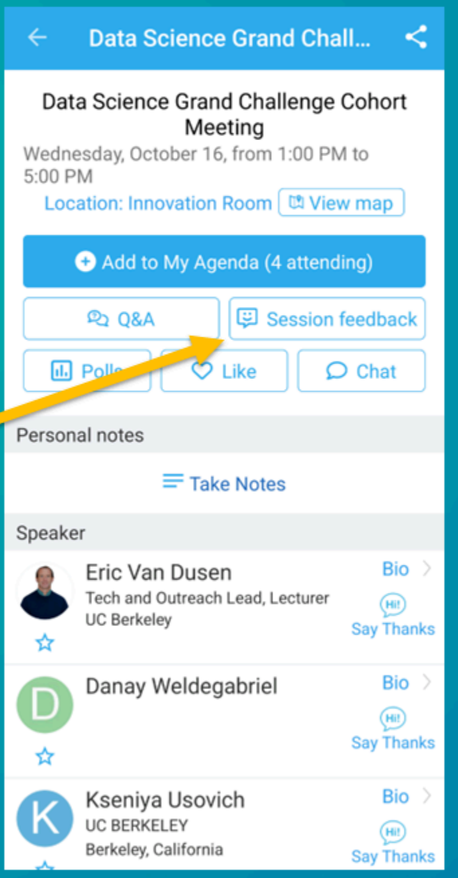
Session Feedback

We'd love to hear from you! Please let us know your thoughts on this session by filling in the feedback form in Whova. Each session feedback survey you complete in Whova will enter you into a prize drawing for a $25 Amazon gift card (hard copy submissions are not eligible, but multiple Whova entries are allowed!). Your input is greatly appreciated!

Step 1: go to the Agenda and select the appropriate session



Step 2: select the Session Feedback button to fill out the brief survey for this session



2024 INSPIRE CONVENING

LEARNING LAB