Using Kira's Platform for CS Instruction

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Housekeeping Items

Webinar is recorded

Slides available along with the recording

Enter your questions in the Q&A box

Watching On Demand, and have questions?

tn@kira-learning.com for platform/course

ashe@battelle.org for anything else

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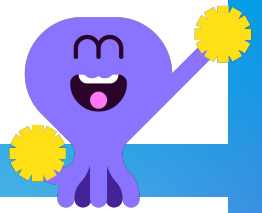
UPCOMING WEBINARS

Join us for our future webinars

www.kira-learning.com/events



December 5, 4 PM CT

Preparing for and teaching the Kira Learning Middle School Course

December 12, 4 PM CT

Preparing for and teaching the Kira Learning High School Course

GOALS FOR THIS WEBINAR

- Details of Kira Learning's ready-to-use courses
- Overview Kira Learning platform
- In-depth exploration of platform features that support learning and teaching
- Sneak peaks at upcoming features

Kira Learning Courses

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KIRA COURSES: STRUCTURE

- Courses are typically into units, each consisting of several lessons
- Each lesson consists of multiple steps
- Each step consists of an instructional video or written instructions and a practice activity
- Each step is designed to take 5-10 minutes to complete
- Each lesson is designed to take no more than 90 minutes to complete

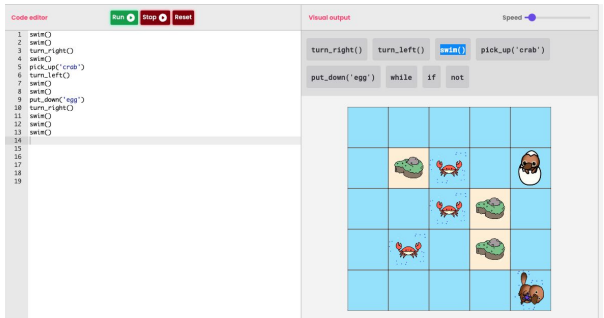
READY-TO-USE COURSES

Introduction to CS Fundamentals in Python

- Covers the basics of the Python programming language with emphasis on artificial intelligence applications and data analysis
- Students learn best practices in programming while completing a variety of exercises, assessments, and projects
- **Kernels of Curiosity** sprinkled throughout the course cover computer science topics beyond programming
- Satisfies AP CS Principles curriculum requirements

Middle School Introduction to Computational Thinking and Programming

- Comprehensive course which introduces the concepts of algorithmic-thinking and coding
- Hardware and software aspects of data representation, collection, storage and analysis
- Computer networks and the internet



READY-TO-USE COURSES (UPCOMING)

Artificial Intelligence Methods and Applications

- Students explore AI applications in use today, while reflecting on their impact on society.
- Deep Learning, building and training AI models using the Python libraries PyTorch, SciKit, and NumPy
- AI application development process
- Students build their own AI applications that can be shared with friends and family

Introduction to Web Development

- Fundamental concepts in Full Stack Web Development in Javascript and Python
- Hands-on projects to apply their skills, while exploring AI-relevant concepts such as a Stable Diffusion-based image classifier

Computer Science Applications with Java

- Fundamentals of computer science and how it is used in real world applications with Java
- Preparation for the AP CS A exam

TEACHER GUIDES

Lesson Plan

Unit 1 Lesson 3: Data Types

Section 1: Overview (10 min.)

This **"Do Now" activity** is meant to get the class thinking about how we naturally use data types – specifically, integers, strings and Booleans.

Sample question-and-answer pairs (scramble the answer bank):

Sentences	Answer Bank
The first connected network of computers (before the internet) was designed by the _____ (source).	Department of Defense
Year the first email was ever sent? (source)	1971
Name of first computer programmer? (source)	Ada Lovelace
The first computer, known as the ENIAC, weighed __tons and took up an entire room (source).	30
__% of the world's data was created in the last 2 years. (source)	90
Alan Turing used computer science to crack German codes in WWII. (source)	True

Think-Pair-Share: Write the above sentences on the board, and scramble the answer bank. Students in pairs should **match the correct answers to their sentences**. Then, ask students to volunteer their answers and *critically* explain their thinking process.

> ***Teaching Tip**: A **Think-Pair-Share** activity involves giving students a prompt to think about, then pairing students up to discuss with each other. Finally, students are invited (or called upon) to share their pair's thinking with the group.*

Learning Goals

By the end of this lesson, students will be able to:

- define data and describe different types of data.
- combine different computer data types.
- print different data types.

Standards Alignment

CSTA K-12 Computer Science Standards	**1B-AP-09**	Create programs that use variables to store and modify data.
	2-AP-11	Create clearly named variables that represent different data types and perform operations on their values.
Tennessee State Computer Science Standards	**MS.AT: Algorithmic Thinking**	Use clearly named variables of various data types to create generalized algorithms.
	CS.PC: Programming Concepts	Develop a plan to manage and assign data values of different types (strings, numeric, character, integer, and date) to a variable.

Part 3: Recommended In-Class Instruction

Lesson Part A

Outline with Timings

Section 1 Overview	10 min.	*Introduce the learning goals and concept of data types and type inference.*
Section 2 Activity	35 min.	*Students will work through Steps 1–5 in Unit 1 Lesson 3: Data Types by watching the videos and doing the exercises.*

Before the Lesson

☐ Write the Do Now sentences and their answers (in scrambled order) on the board, or project them on a screen, or print them out and distribute them.
☐ Complete the lesson activities on your own so that you are prepared to answer questions and provide support as needed.

Kira Learning Platform

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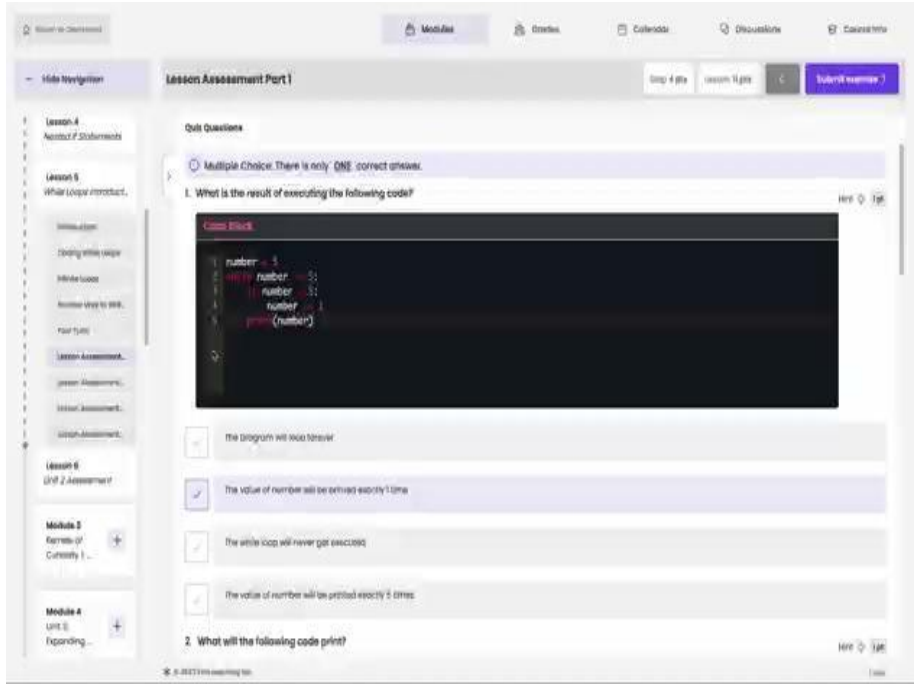
STUDENT EXPERIENCE: CLASS AND ACTIVITIES



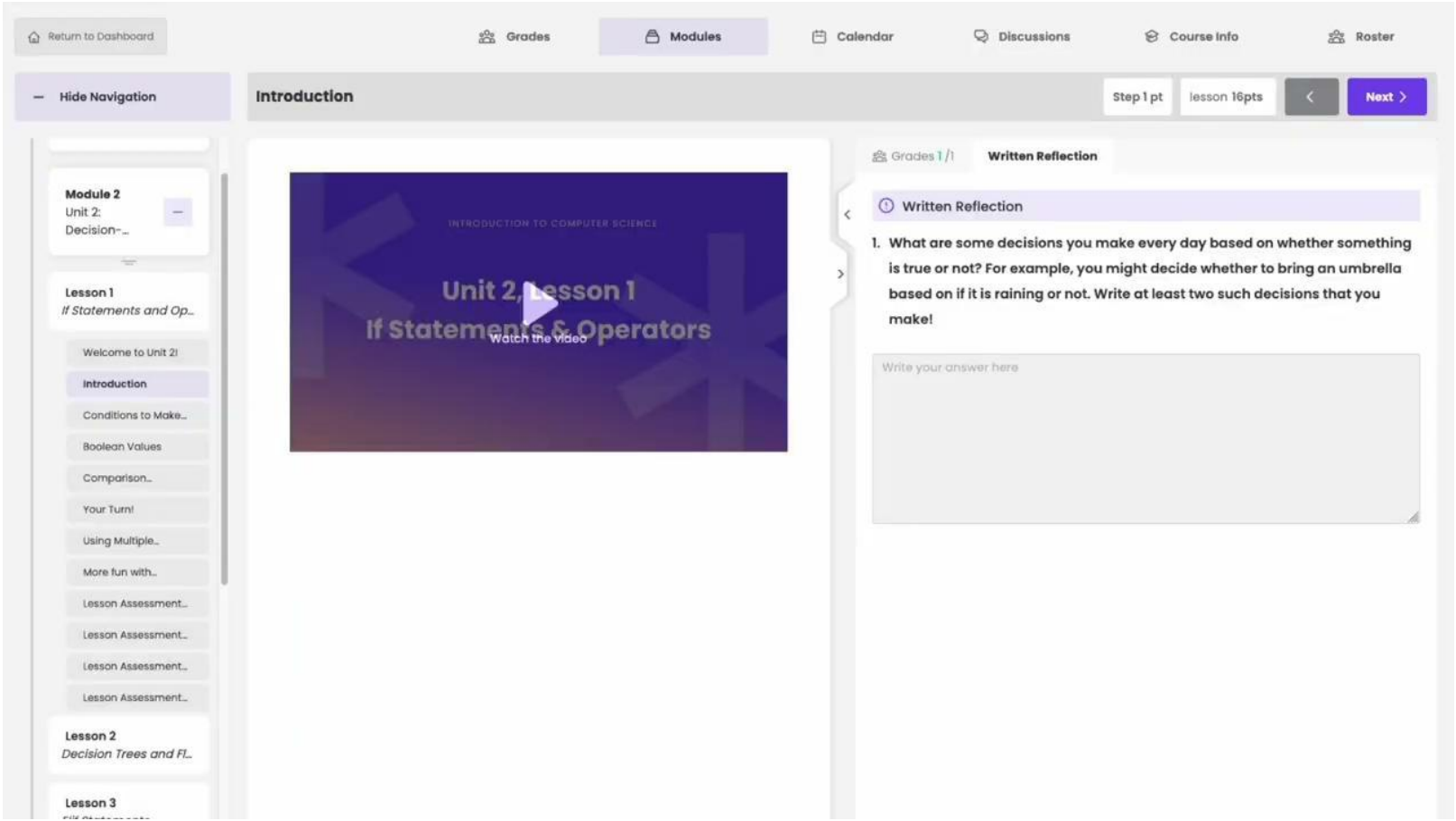
TEACHER EXPERIENCE: PROVIDING FEEDBACK

TEACHER VIEW

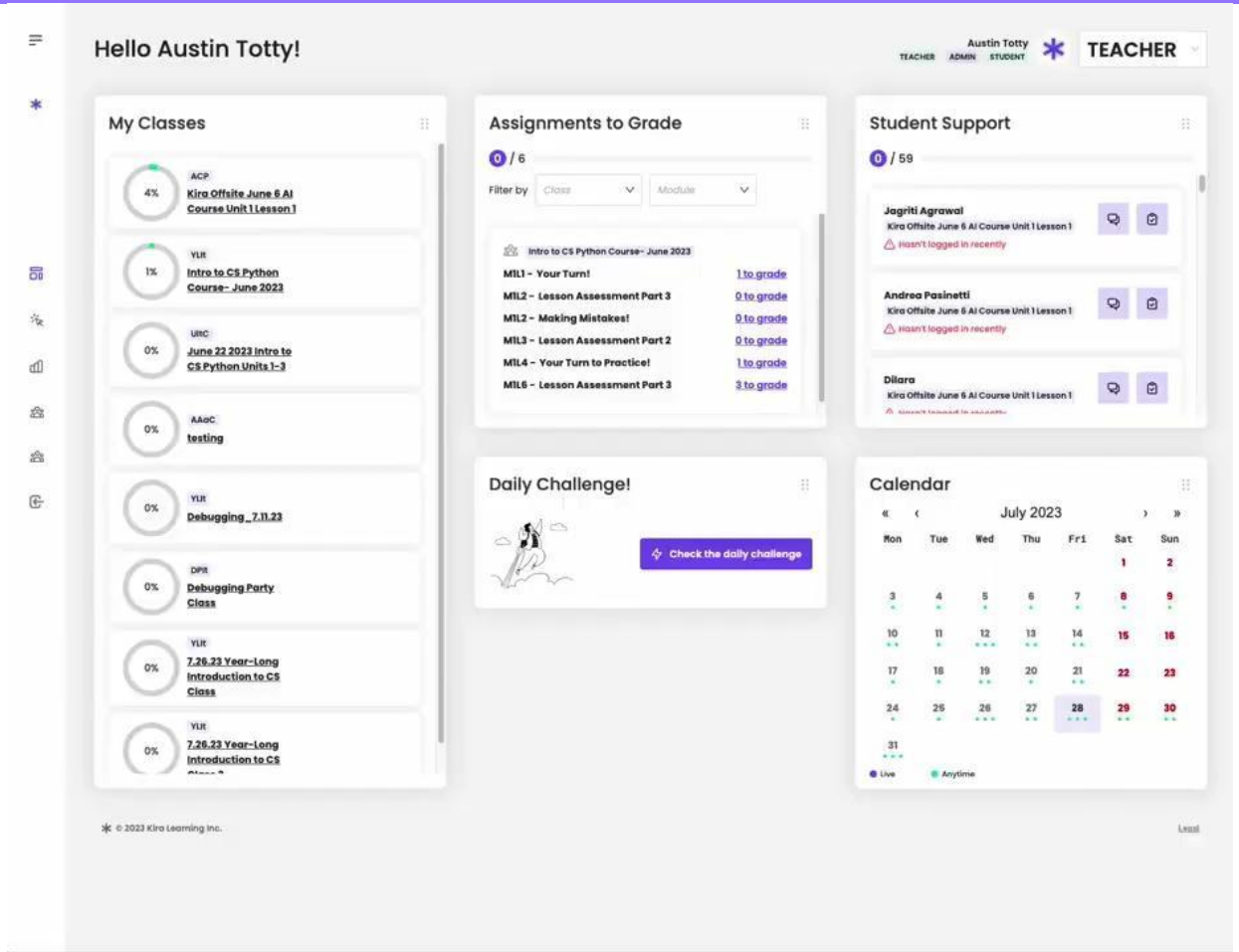
TEACHER EXPERIENCE: PROVIDING FEEDBACK

STUDENT VIEW

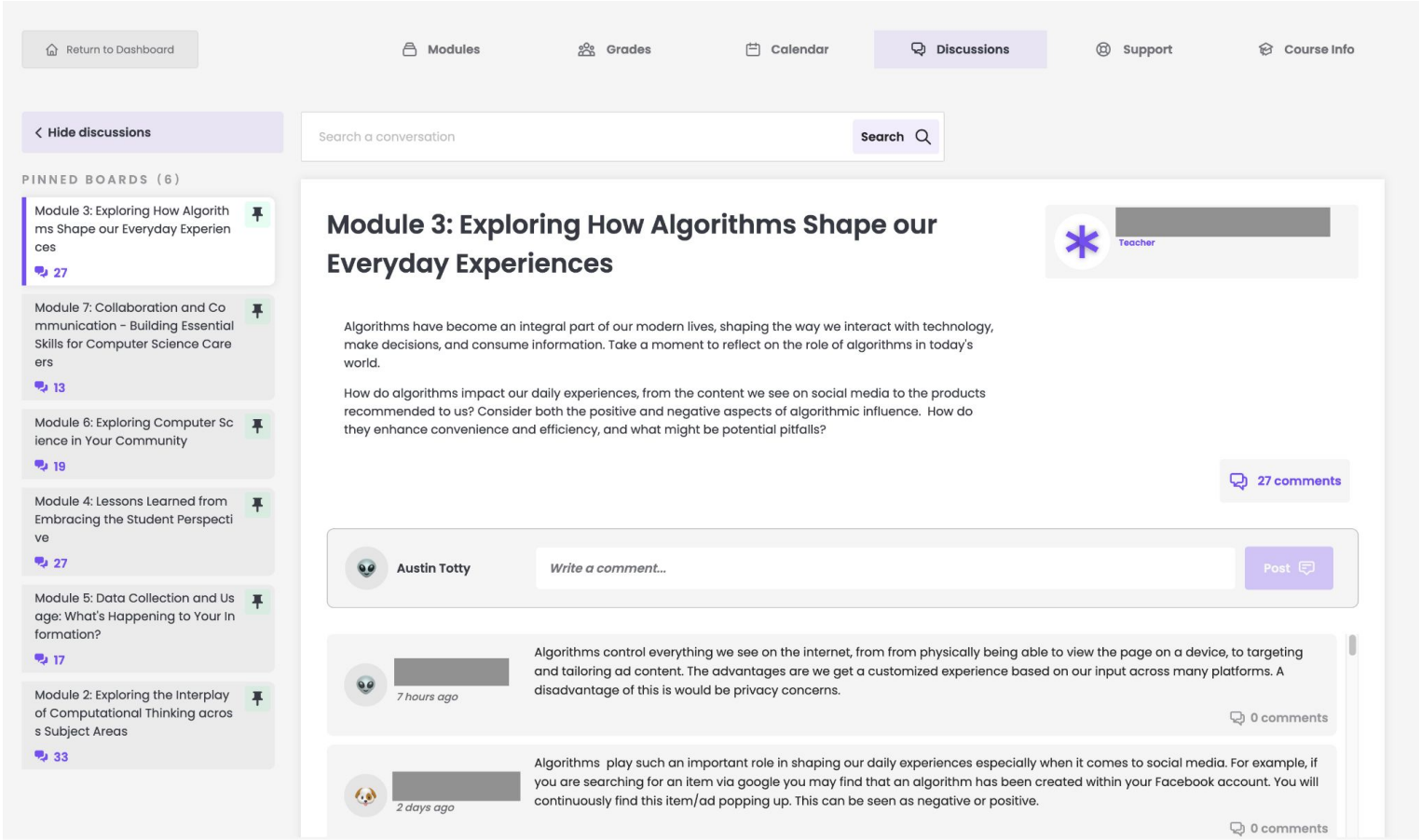
TEACHER EXPERIENCE: GRADEBOOK



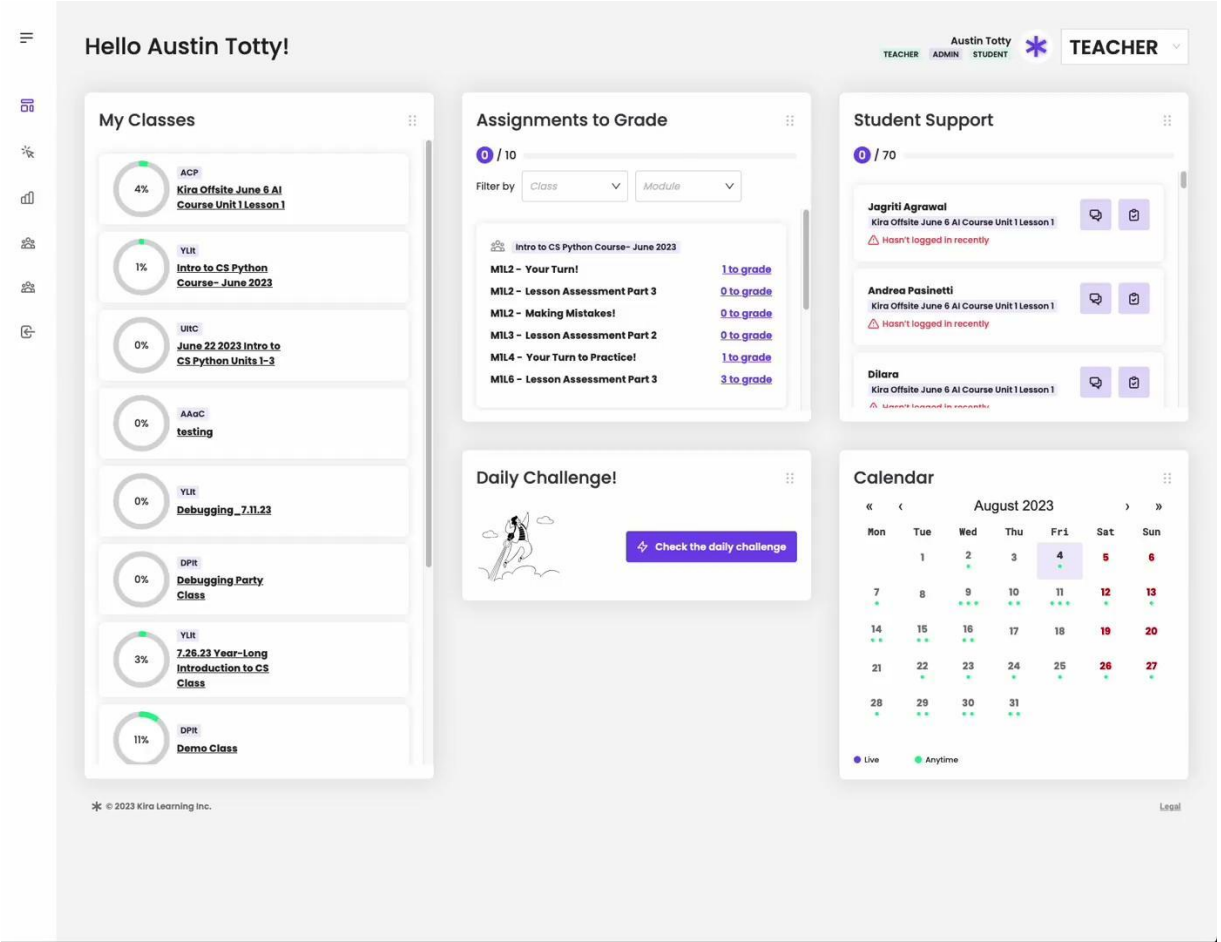
TEACHER EXPERIENCE: INVITING STUDENTS & ROSTERS



DISCUSSION BOARDS



DASHBOARD


Hello Austin Totty!
Austin Totty
TEACHER ADMIN STUDENT
TEACHER
My Classes
4%
ACP
Kira Offsite June 6 AI Course Unit 1 Lesson 1
1%
YLit
Intro to CS Python Course- June 2023
0%
UitC
June 22 2023 Intro to CS Python Units 1-3
0%
AAaC
testing
0%
YLit
Debugging_7.11.23
0%
DPit
Debugging Party Class
3%
YLit
7.26.23 Year-Long Introduction to CS Class
11%
DPit
Demo Class
Assignments to Grade
0 / 10
Filter by
Class
Module
Intro to CS Python Course- June 2023
M1L2 - Your Turn! 1 to grade
M1L2 - Lesson Assessment Part 3 0 to grade
M1L2 - Making Mistakes! 0 to grade
M1L3 - Lesson Assessment Part 2 0 to grade
M1L4 - Your Turn to Practice! 1 to grade
M1L6 - Lesson Assessment Part 3 3 to grade
Student Support
0 / 70
Jagriti Agrawal
Kira Offsite June 6 AI Course Unit 1 Lesson 1
Hasn't logged in recently
Andrea Pasinetti
Kira Offsite June 6 AI Course Unit 1 Lesson 1
Hasn't logged in recently
Dilara
Kira Offsite June 6 AI Course Unit 1 Lesson 1
Daily Challenge!
Check the daily challenge
Calendar
August 2023
Mon Tue Wed Thu Fri Sat Sun
Live
Anytime
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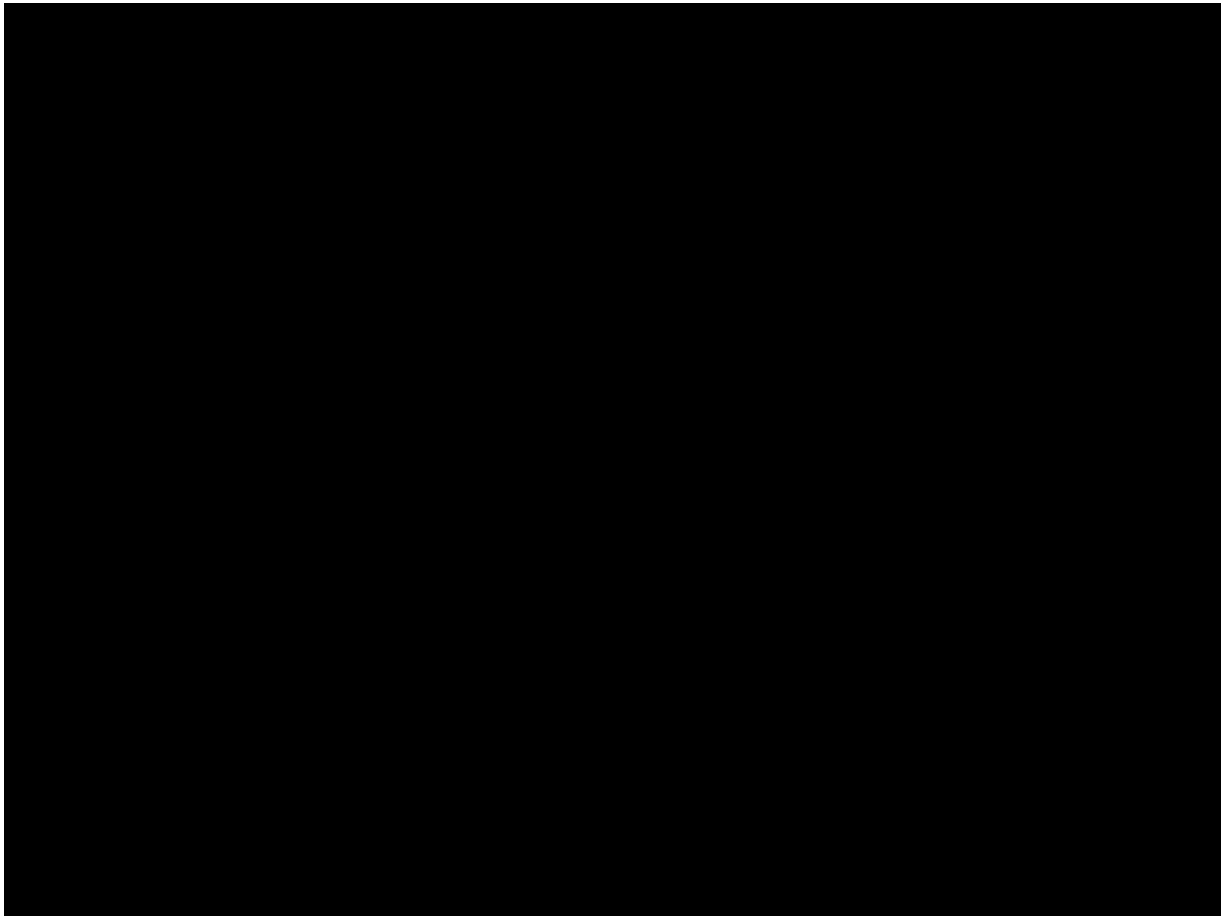
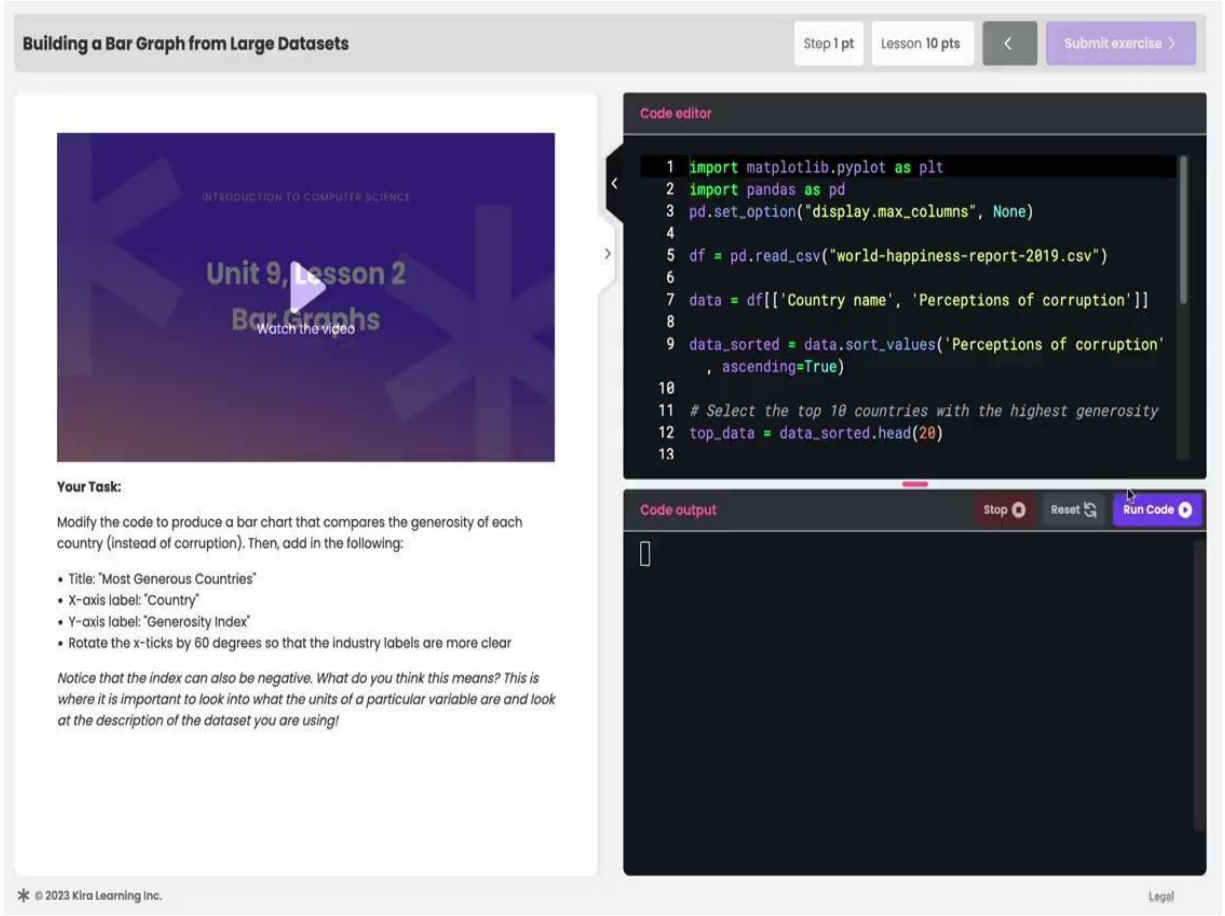
IN DETAIL: PLATYPUS ACTIVITY

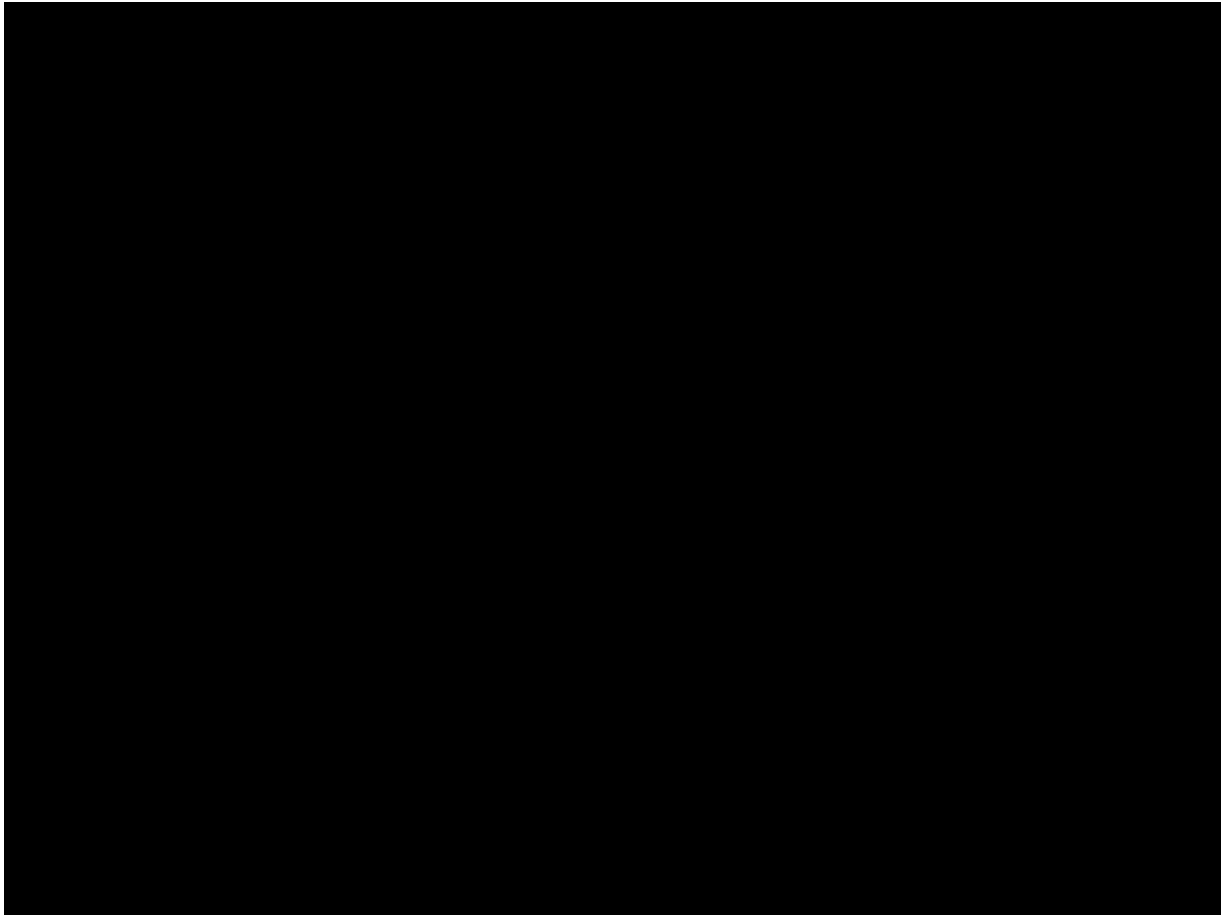


IN DETAIL: IN-CLASS IDE



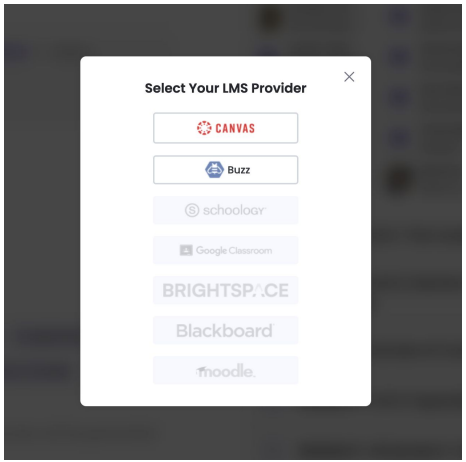
Upcoming Features

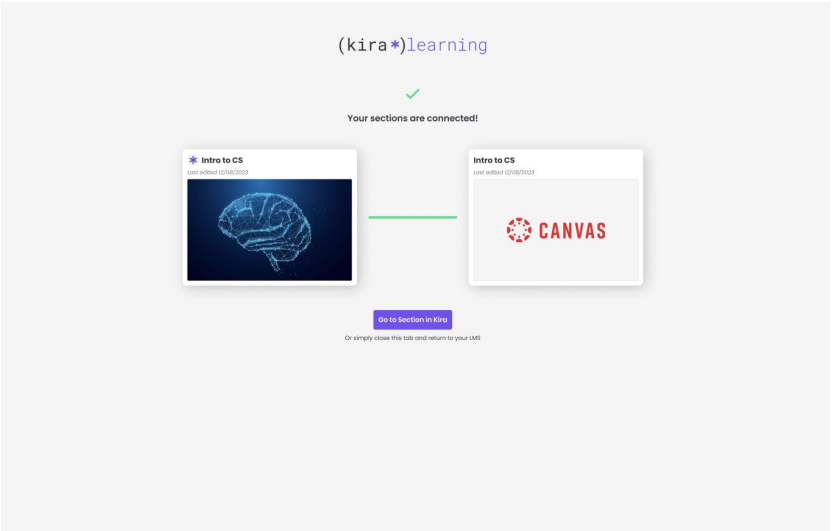
AI TUTOR



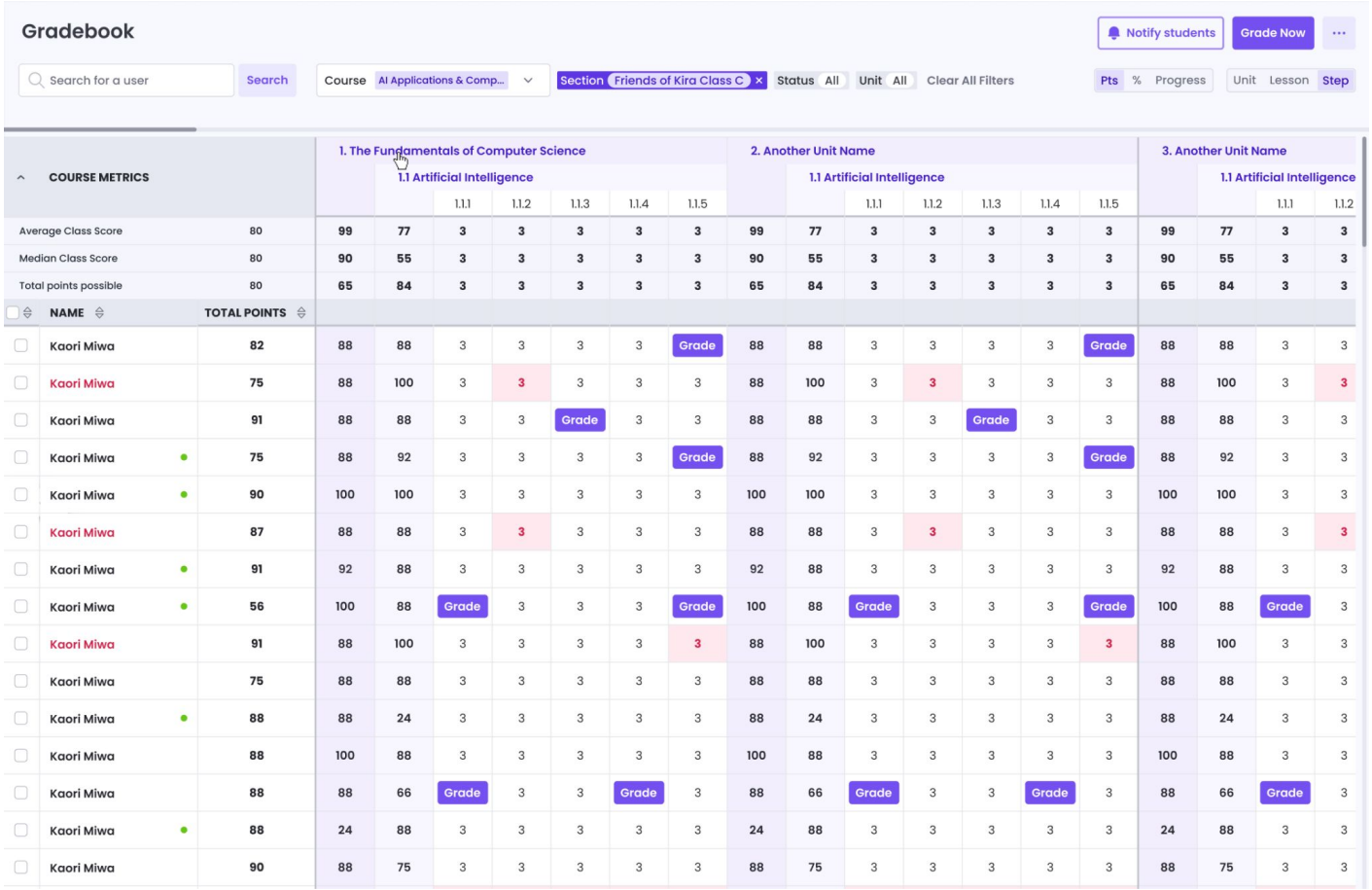
LMS INTEGRATIONS

- LTI 1.3 Advantage
- SSO
- Roster sync
- Grade/Assignment Sync

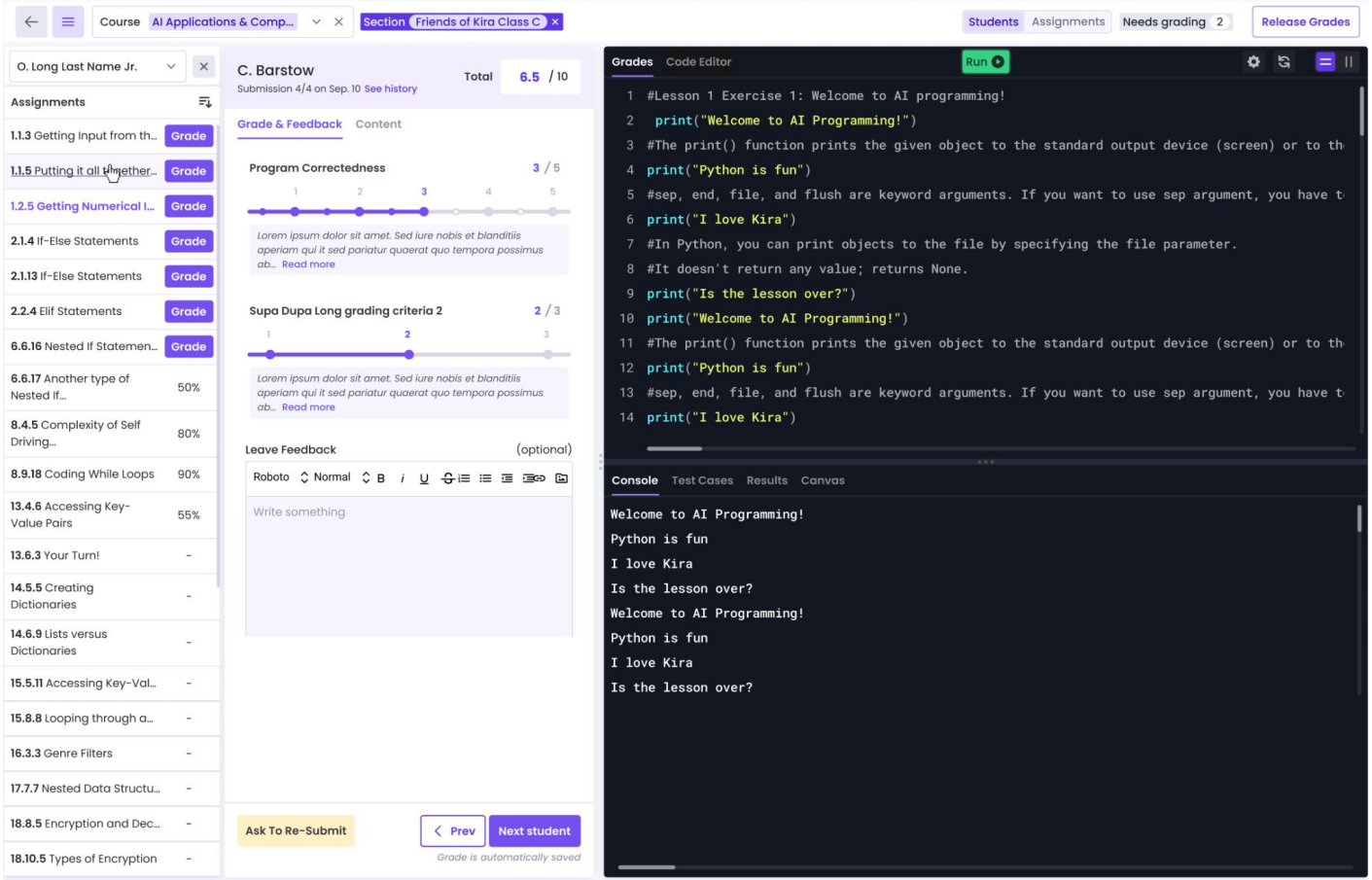




GRADEBOOK UPDATES



GRADING UPDATES



QUESTIONS?

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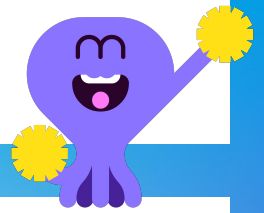

For questions about the Kira platform or courses:

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For all other questions:

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