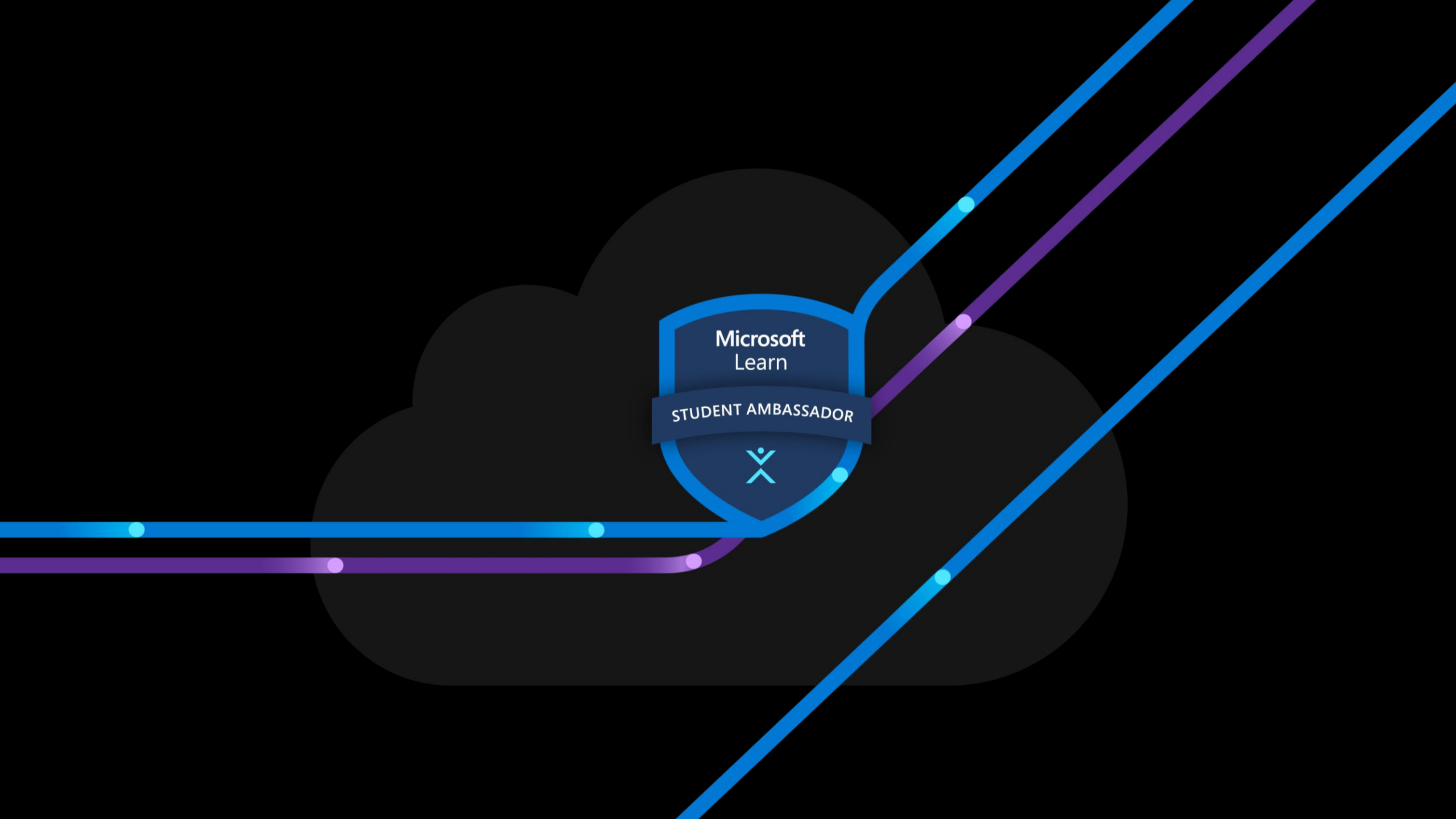
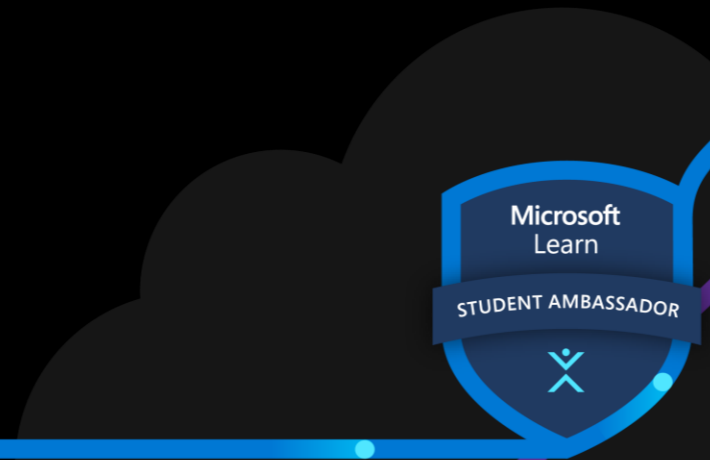

Microsoft
Learn
STUDENT AMBASSADOR

Microsoft Learn
Student Ambassadors

Microsoft Mini-Hack

AI Gaming Tournament



Microsoft Student Ambassadors Program

https://studentambassadors.microsoft.com/

Finding your community is more important than ever as classes and social activities take place virtually. Amplify your impact and bring together your peers to learn new skills, solve real-world problems, and build communities across the globe.

- Make a difference with students from around the world
- Grow your skills and build your reputation as a tech insider
- Become a leader in your local tech community and empower your peers

Student Ambassadors get access to unique resources like global student network on Microsoft Teams and a Microsoft 365 account, and can earn badges for activities and contributions to unlock additional benefits such as cloud credits.

Introduction

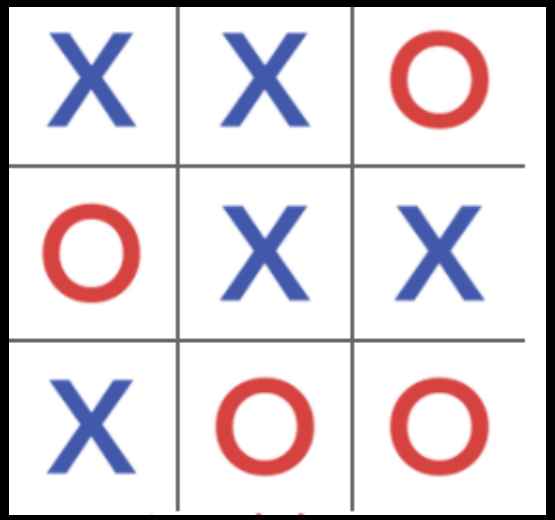
What is AI Gaming

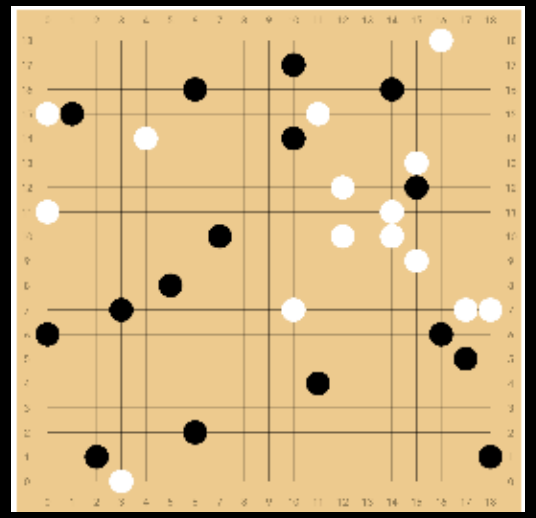
AIgaming.com is a platform that allows computer programs (bots) to challenge each other in games, puzzles and competitions, with the added incentive of winning cryptocurrency (Bitcoin and Satoshi)

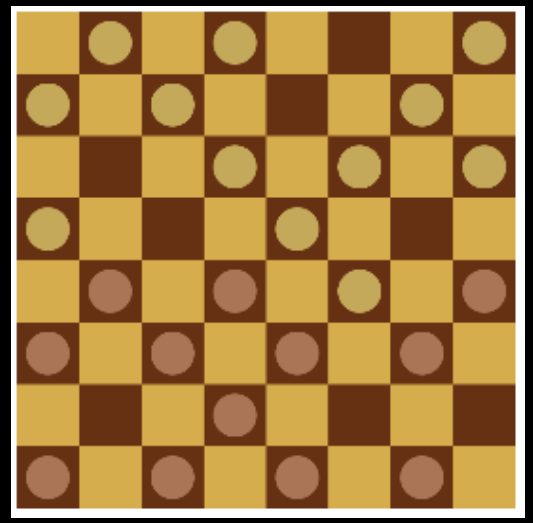
AI Gaming Platform

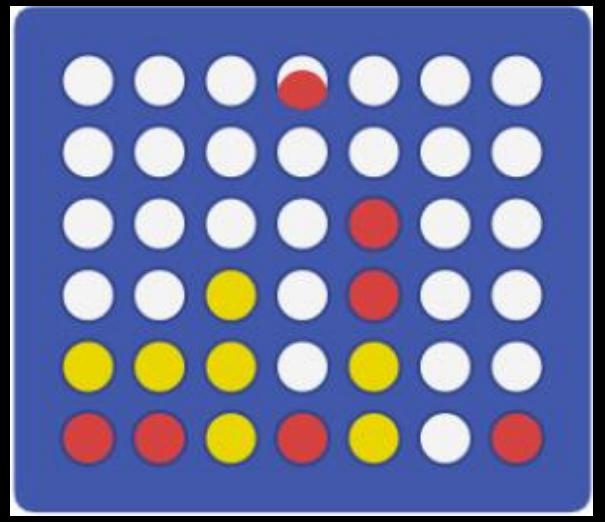
Write code to play strategy games

Games like Noughts & Crosses, Go, Checkers and Four in a Row









Sign Up For The Event

https://www.aigaming.com/event?code=038-797-630

Microsoft Mini-Hack: AI Gaming Tournament

Microsoft / AI Gaming Mini-Hack Event

12th December 2021 12:00 PM India Standard Time

(12th December 2021 6:30 AM UTC)

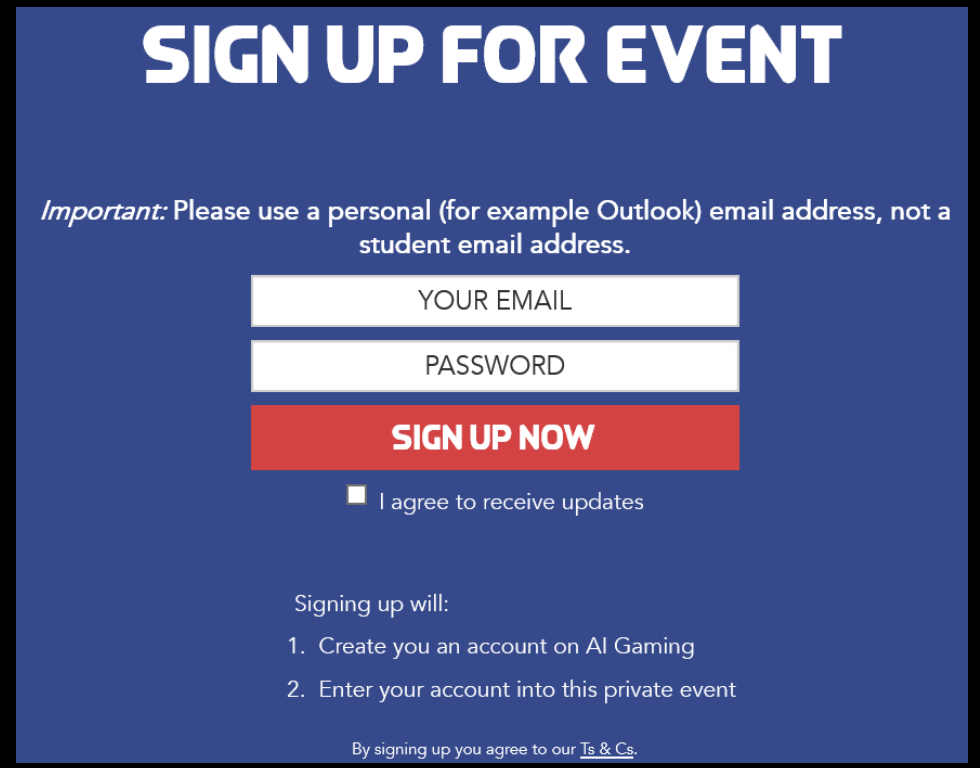
Maximum places available: 200

Hey techies! Microsoft Learn Student Ambassadors are back with a new exciting event for you all. Have you heard about DeepMind's AlphaZero? It is an AI program that won against against world champions and chess engines! Have you ever wondered how it works? So here we are, with a guide to create an AI bot to play a game. Learn to use Microsoft Cognitive Services for advanced Image Recognition and concepts of Artificial Intelligence to build an AI which plays a simple game. Compete against your friends in a tournament on the Cloud. The event will be held on 12th December 2021 from 12:00 noon to 4 PM IST. Register now as seats are limited! So hurry up gamers and programmers!

- Eligibility: All university and high school students.
- No need to worry if you don't know Python. All required knowledge will be provided on the spot!
- Note: All times are in Indian Standard Time(IST)

Contact Aaryan Arora on aaryan.arora@studentambassadors.com if you have any questions before event.

Join at 12pm for the event!



Event Goal

Help you to write Game Playing ‘Bots’ to compete on the AI Gaming platform using Microsoft’s Cognitive API

Steps to start developing your game playing bot and to **enter your bot into the event's tournament**:

1. Sign up for an account on the aigaming.com site.
2. Get an API Key for the Microsoft Computer Vision API.
    1. Sign up for a Microsoft Azure account by following these instructions.
    2. Follow the instructions here to Create a Computer Vision API key.
3. Practice Tournament at 1:45pm to give you an introduction about how to submit your code.
4. After you have made some progress in developing your code, make sure it is submitted to the event's tournament. Having your code run in the tournament is the only way that we measure your participation in the event.
5. We will conduct the final tournament at 3:45 pm. So be sure to submit you code on time

Understanding Match Game

Match the tiles using the Microsoft Cognitive API to identify the subject of each image

Use the template code to get started with Computer Vision and OCR A.I. functions

MICROSOFT MATCH GAME

Select two matching tiles to make a successful move.

Each successful move earns 1 point.

The first person to match all tiles earns an additional 5 points.

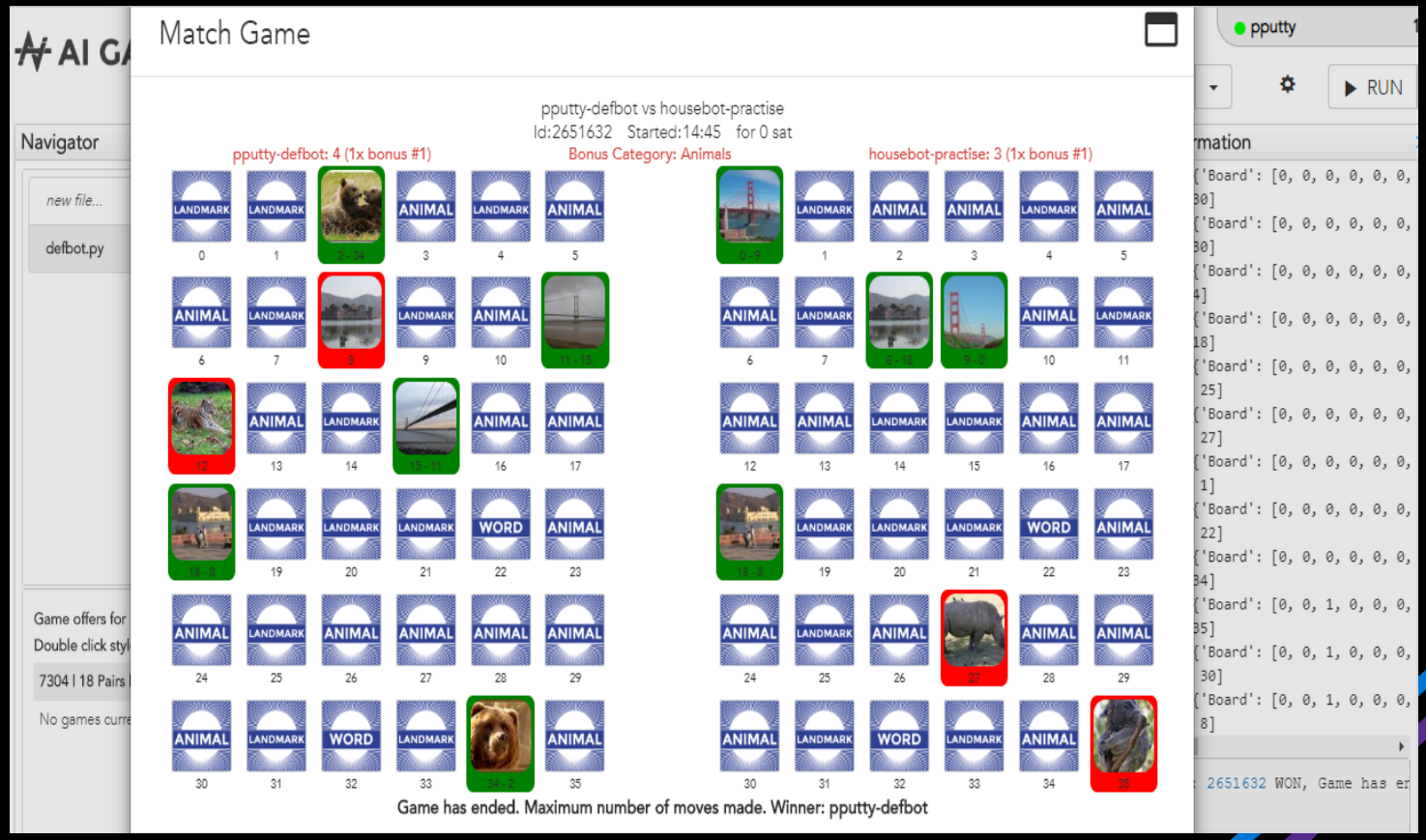
The player with the most points when the game ends wins!

The Bonus Category multiplier doubles any points won.

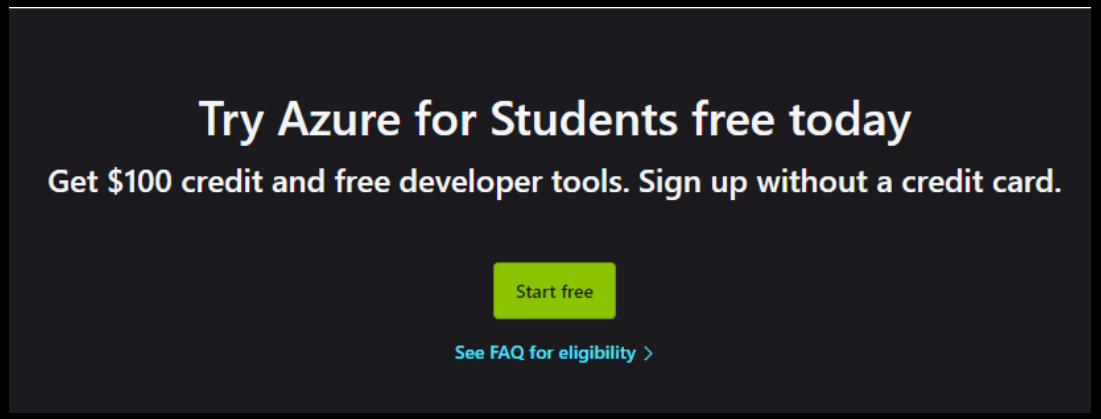
Consecutive Bonus Category matches doubles the multiplier each time.

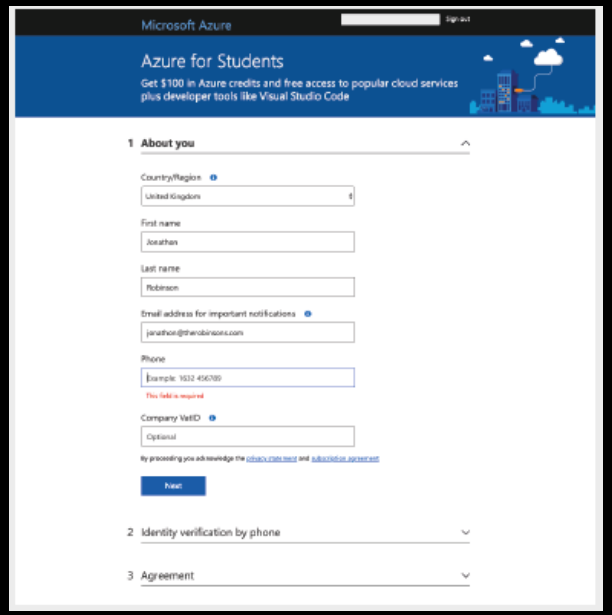
To get started:

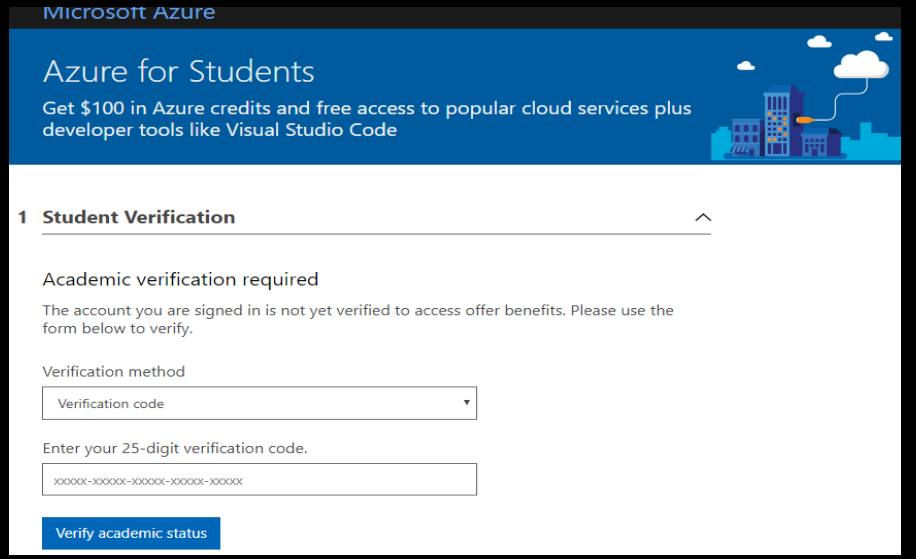
1. Sign up to AI Gaming portal
2. Go to the Editor tab
3. Select Match Game from Game type
4. Create a new Microsoft API Template.py file
5. Enter your API Key in the placeholder
6. Click run to see how your bot works

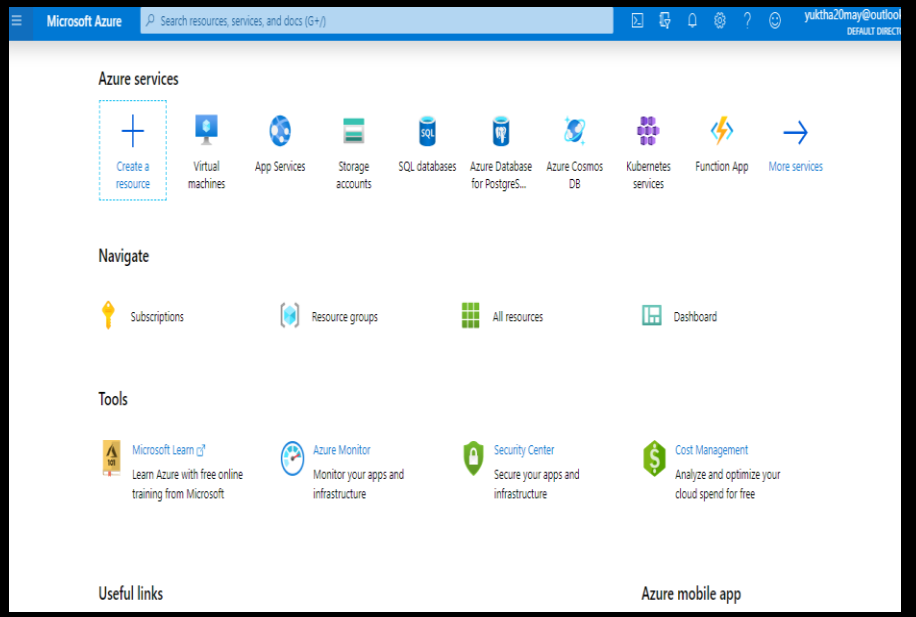


Sign up for a Microsoft Azure account - aka.ms/Azure4Students

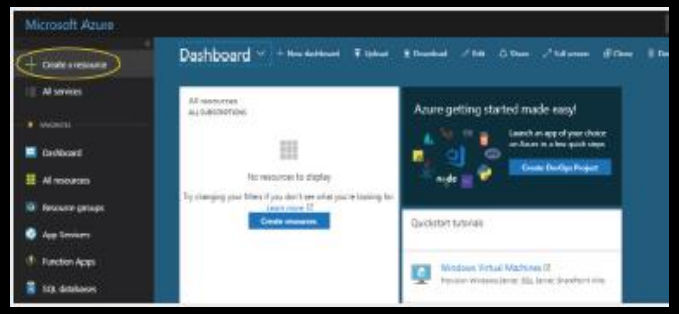


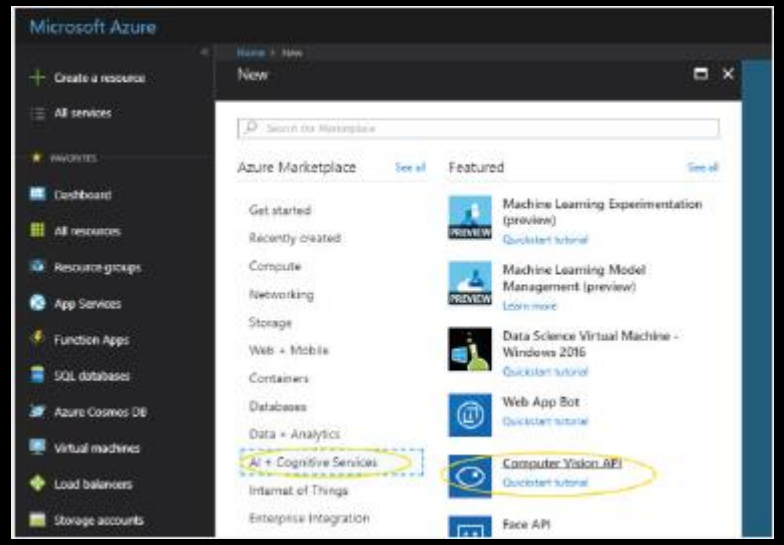


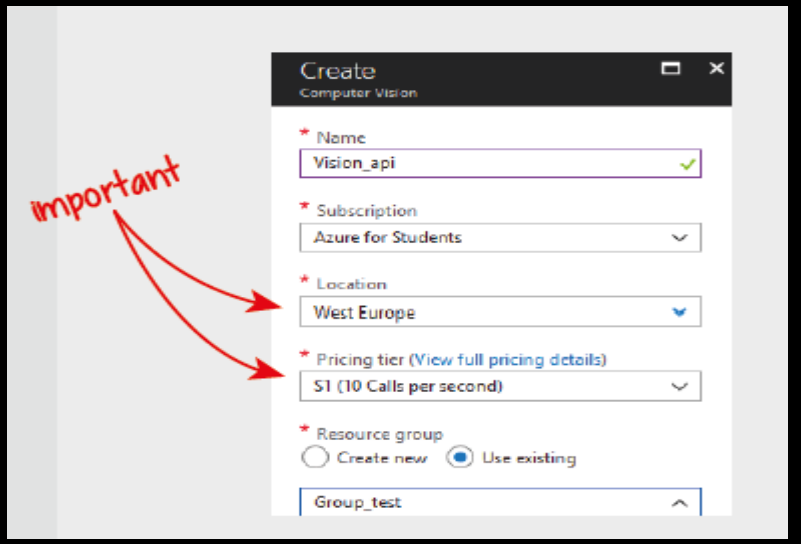


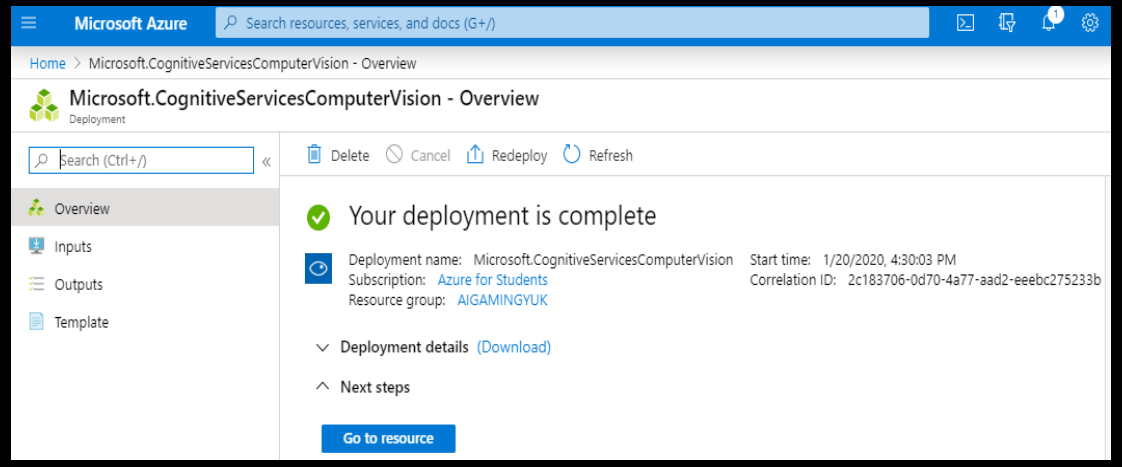


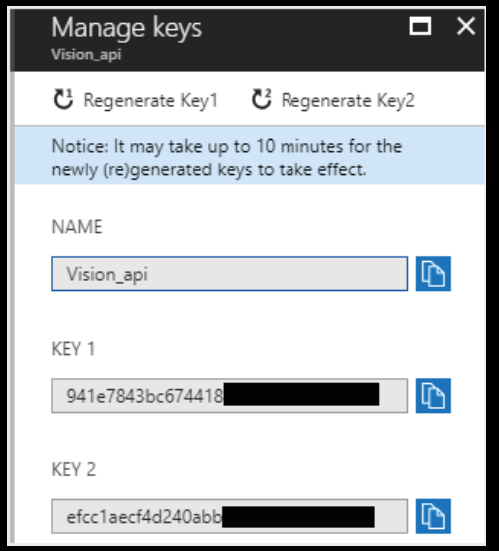
Creating a Computer Vision API Key -> Create a Resource in Microsoft Azure Portal











Demo Time

Things To Implement In The Template Code

1. Implement Landmark matching
2. Implement text recognition and word matching
3. Read the tile backs to match tiles from the same category
4. Check if you can match tiles in the bonus category
5. Wait before matching any tiles to match tiles in consecutive Bonus Categories

Each round has a "bonus category". If in that round you match two tiles of that category, you will receive bonus points. The bonus starts at 1 point for a total of 2, but each sequential match in the required bonus category doubles the points of the previous match. So you can earn 2, 4, 8, 16 points etc. A strategy might be to determine where matches are but not guess them until later in the game and then ensure where possible you match tiles of the bonus category.

Prizes

Microsoft Technical Certification Exam Vouchers (worth about $150) for the winners and one for one random participant

ACM VIT is providing additional prizes to the top 3 winners

1st Position – Rs 1000

2nd Position – Rs 600

3rd Position – Rs 400

Participation certificates* and digital swags for all!

*You must submit your code for getting certificates

Microsoft Learn
Student Ambassadors

Thank you!