# MISF STEM Education Conference August 3, 2022

Let's Code!

Try out the CoderZ Platform!



## INTRODUCTIONS

Cheryl Moeller, Executive Director, High Tech Kids

- Worked as an Electrical Engineer for 7 years
- Worked in informal STEM education since 2004 (Bakken Museum, University of St. Thomas STEPS program, STEM Ahead and High Tech Kids
- Frustrated by own coding experience in college and lack of knowledge
- Proud mom of 3 computer scientists

Jeannie Badger, Programming Lead Trainer, High Tech Kids

- Entrepreneur, business background, tutorial lover
- Has coached FIRST LEGO League and FIRST Tech Challenge for many years
- Owned her own robotics education business
- Certification by Carnegie Mellon Robotics Education
- High Tech Kids expert in CoderZ

## HIGH TECH KIDS STEM PROGRAMS

High Tech Kids is the Minnesota Partner for these STEM programs









150 MN Teams

412 MN Teams

168 MN Teams

We expect to support over 900 robotic teams in the 2022-2023 season!

## FIRST PROGRAMS



#### FIRST LEGO League Explore

September through April

6 to 9 year olds (K – 3rd grade)

Teams of 2 to 6 kids

2021 MN teams: 150

750 students



#### FIRST LEGO League Challenge

September through February 9 to 14 year olds (4<sup>th</sup>- 8<sup>th</sup> grade)

Teams of 3 to 10 kids

2021 MN Teams: 412

2,884 students



#### FIRST Tech Challenge

September through March 13 to 18 year olds (7th- 12th grade)

Teams of 3 to 15 kids

2021 MN teams: 168

1,176 students

## CoderZ PROGRAMS

## CoderZ,

#### **CoderZ Leagues**

October through January
9 to 18 year old (4<sup>th</sup>- 12<sup>th</sup> grade)

Teams of 6students

2019 MN Teams: a few? 2020 MN Fall Teams: 41 2021 MN Spring teams: 8

#### CoderZ Curriculum

annual license

9 to 18 year old (3rd- 12<sup>th</sup> grade)

Curriculum sold as a package

2019 MN schools: 0 2020 MN schools: 7 2021 MN schools: 8 CoderZ is a powerful, award-winning online platform through which students learn valuable STEM skills such as coding, robotics, and physical computing.

CoderZ is highly flexible and designed for use in the classroom or through a wide range of remote learning environments.

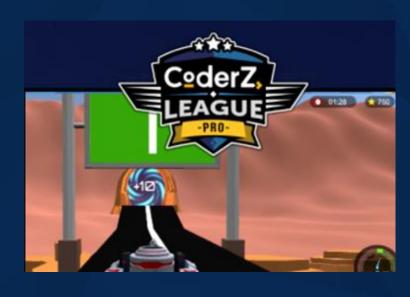




## Three Leagues







4<sup>th</sup>-6<sup>th</sup> Grade
Intro to STEM for students with no previous robotic &

codina

**NOVICE** 

JUNIOR

4th-9th Grade

Student with some previous robotic & coding

PRO
7th-12th Grade
Student with
significant robotic &
coding



### How Does It Work?



#### 6 Reasons to Make Virtual Robotics Program a Core Part of Your Curriculum

July 06, 2021

Why all schools should integrate a virtual coding and robotics platform into their learning environments.

GUEST COLUMN | by Paul Keeney



https://www.edtechdigest.com/2021/07/06/6-reasons-to-make-virtual-robotics-program-a-core-part-of-your-curriculum/

## 'MIDDLE SCHOOL STUDENTS LIKE ACTION, AND THEY LIKE THINGS TO HAVE A PURPOSE.'

- 1. Virtual robots are just as "real" as their physical counterparts
- 2. Virtual robotics helps students develop new skills.
- 3. They support equity in education.
- 4. Kids can work at their own pace.
- 5. Students love it.
- 6. Teachers can easily track student progress and understanding.

The CoderZ Adventure

TEACHER'S GUIDE

Novice

lightweight course that will emuble your

tudents to learn coding, robotics, and math.













#### CoderZ,



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#### Jeannie Badger

Scoreboard



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CoderZ League



My Classes



My Projects



Scoreboard



Administrator



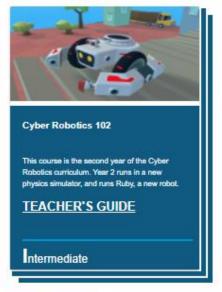
Base

#### My Courses

#### Grades 3-5



#### Grades 6-8





programming, critical thinking, and mobile

robotics.



Grades 7-12

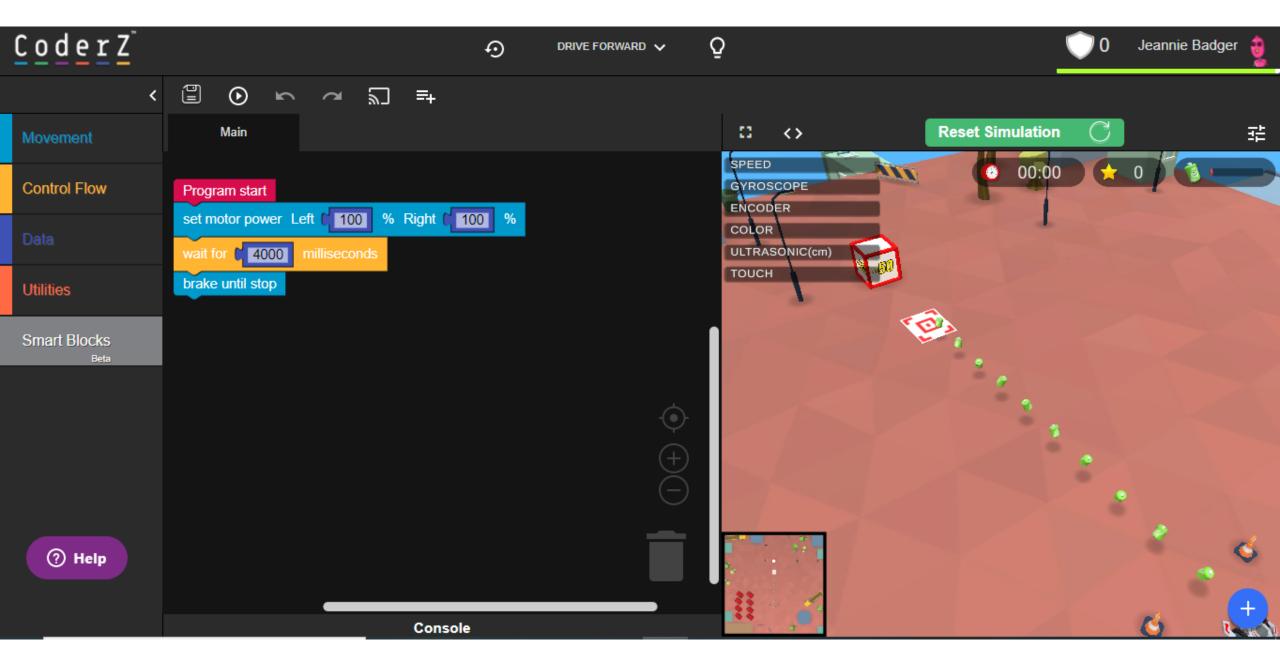














Teacher

53600

Name: Jeannie Badger

Score:

Students score :

Class

Name: HTK Robotics

Score:

53600

RANK	AVATAR	FIRST NAME	LAST NAME	SCORE	COMPLETED MISSIONS	AVERAGE ATTEMPTS
1		Craig	Hamilton	5000	50	1.5
2		Rob	Neitzel	5000	50	2.6
3	9	Dan	Oelke	4900	49	1.5
4		Sarah E	Smith	4700	47	3.5
5		John	Wojciuk	4300	43	<b>2.8</b> 13

Your turn to play with CoderZ!

Some quick Slide Views:

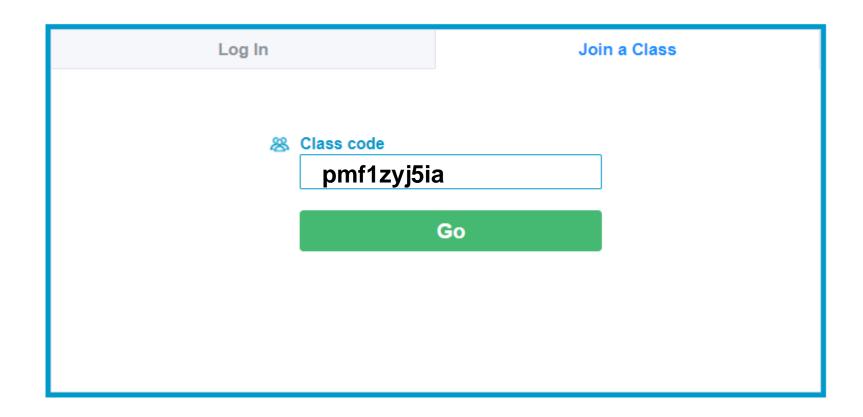


English v

Log In	Join a Class		
∠ Username / Email			
		G	Sign in with Google
Password	7	Class Life	Sign in with ClassLink
	Or	С	Sign in with Clever
Login		==	Sign in with Microsoft
Remember me <u>Forgot your passwo</u>	ord?		







CoderZ,

Power Up Your Future

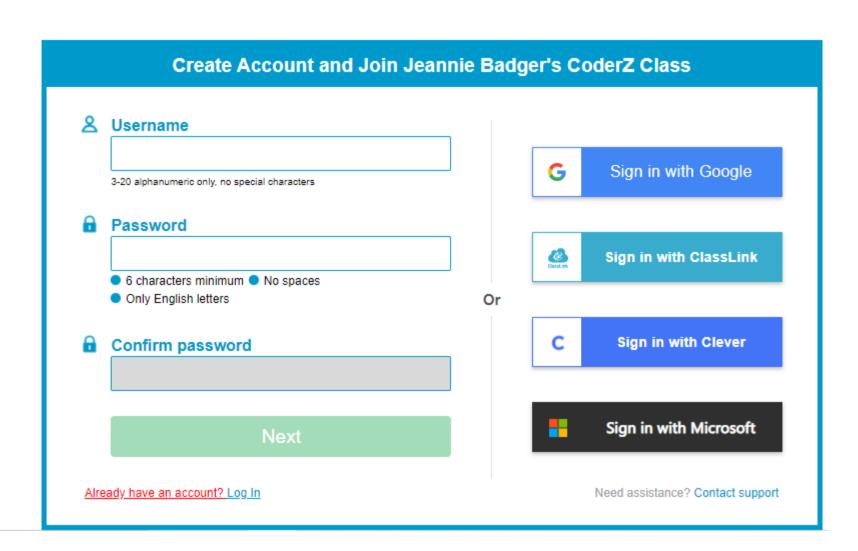


English 🗸

## **Create Account and Join Jeannie Badger's CoderZ Class** Already have an account? Log In Or Don't have an account? Sign up Already have an account? Log In Need assistance? Contact support

~





#### Create Account and Join Jeannie Badger's CoderZ Class

How old are you?
18
Grade
~
Gender
•
First Name
Last Name
I agree to the <u>terms of service</u>
Login

Already have an account? Log In

Need assistance? Contact support

#### CoderZ,





Learning Center My Courses

Novice

#### Scoreboard



My Projects

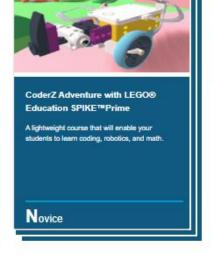


Scoreboard



Knowledge Base











? Help

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Accept

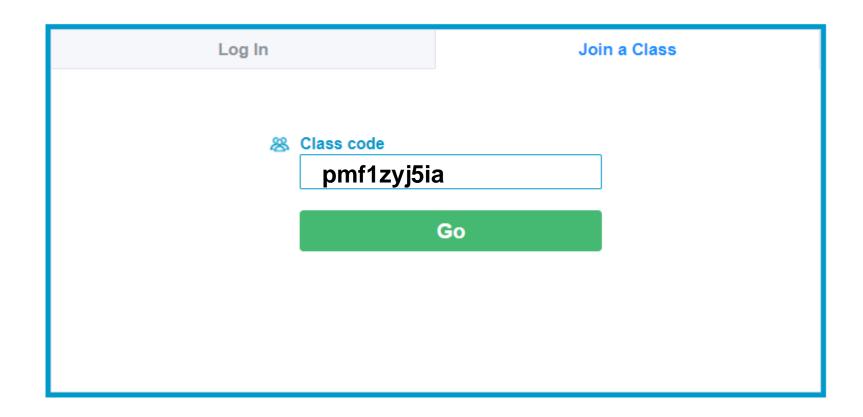
Your turn to play with CoderZ!

Head to this address:

## play.gocoderz.com







CoderZ,

Power Up Your Future

## 2021 PRICING

#### CoderZ League

- \$290/team (6 students/team)
- 50% off 5+ teams
- Add Curriculum at time of registration \$240/team

#### CoderZ Curriculum

- Less than 30 seats \$35.00/student
- 30-99 seats \$22.00/student
- 100+ seats \$18.00/student
- School/Site License 1,000 seats \$2,400
- Multi-Product Discounts 50% off 2<sup>nd</sup> Course

#### Potential FUNDING -

- East metro, for 50% or more students of color and/or low income, Funding for curriculum, leagues and an educator stipend (\$1,000) Details on our website
- MISF STEM grant
- Future funding may be announced, sign up on High Tech Kids CoderZ e-newsletter to be informed of any new funding.

www.hightechkids.org

Jeannie Badger: jeannie@hightechkids.org