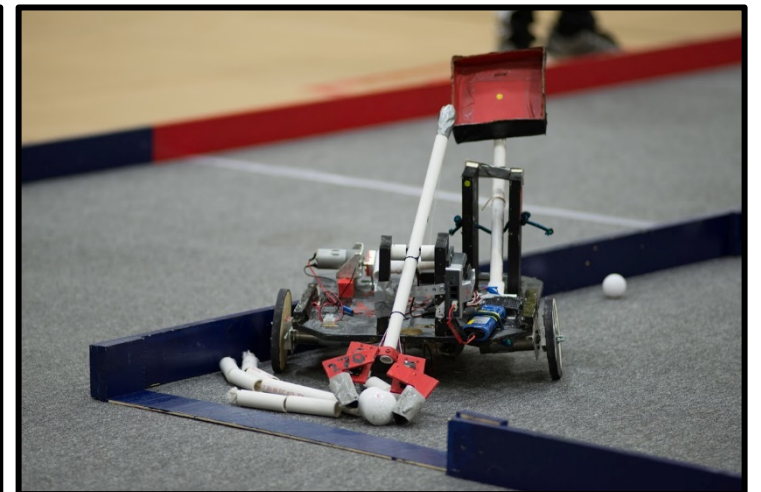
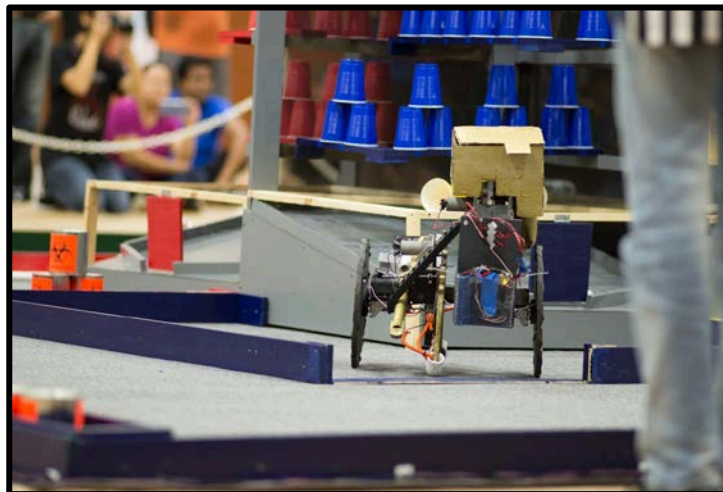


Competition Overview

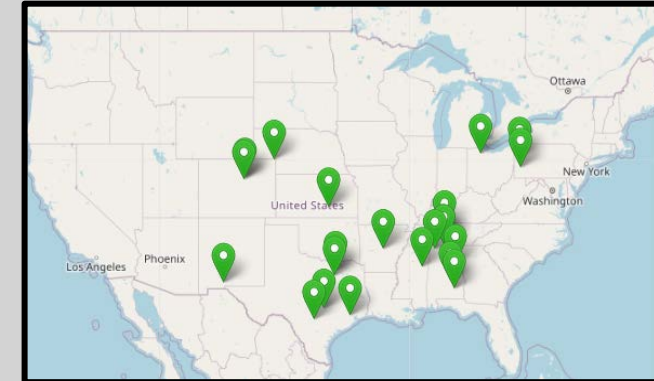
February 2, 2021



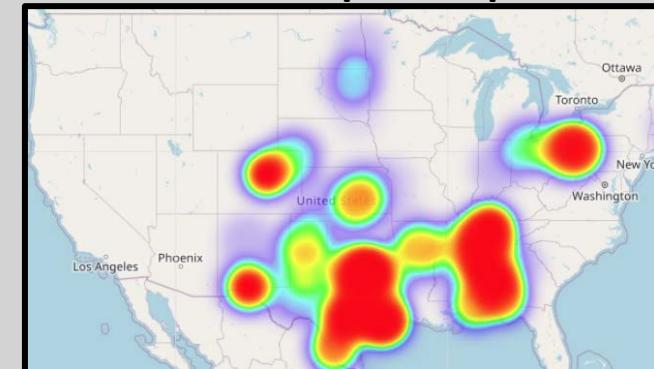
Competition Overview

- Hub Level Competition
 - Held in local community/geographic area
 - Hubs follow the same rules, schedule & kit materials
 - One to Two-day event
 - Teams advance to a Regional Championship based on Hub performance
- Regional Championship
 - Competition between winners of Hub Level competitions
 - Two to Three-day event

Hubs

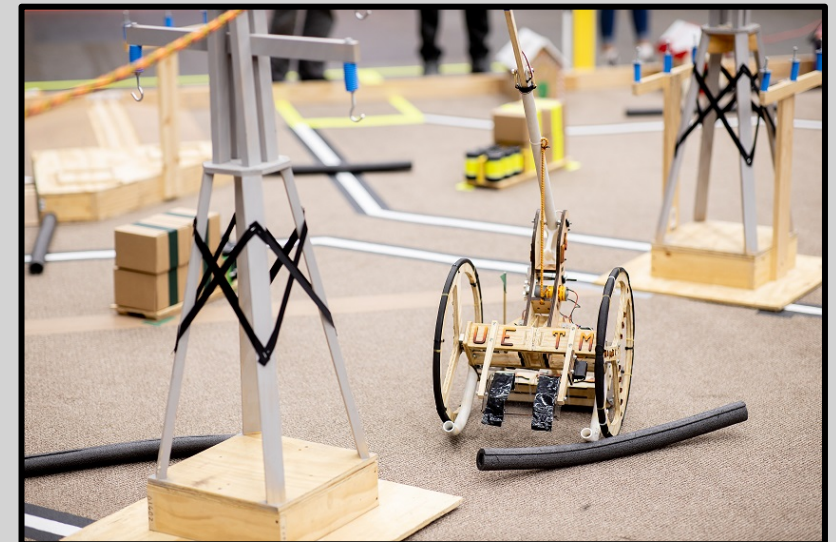


Championships

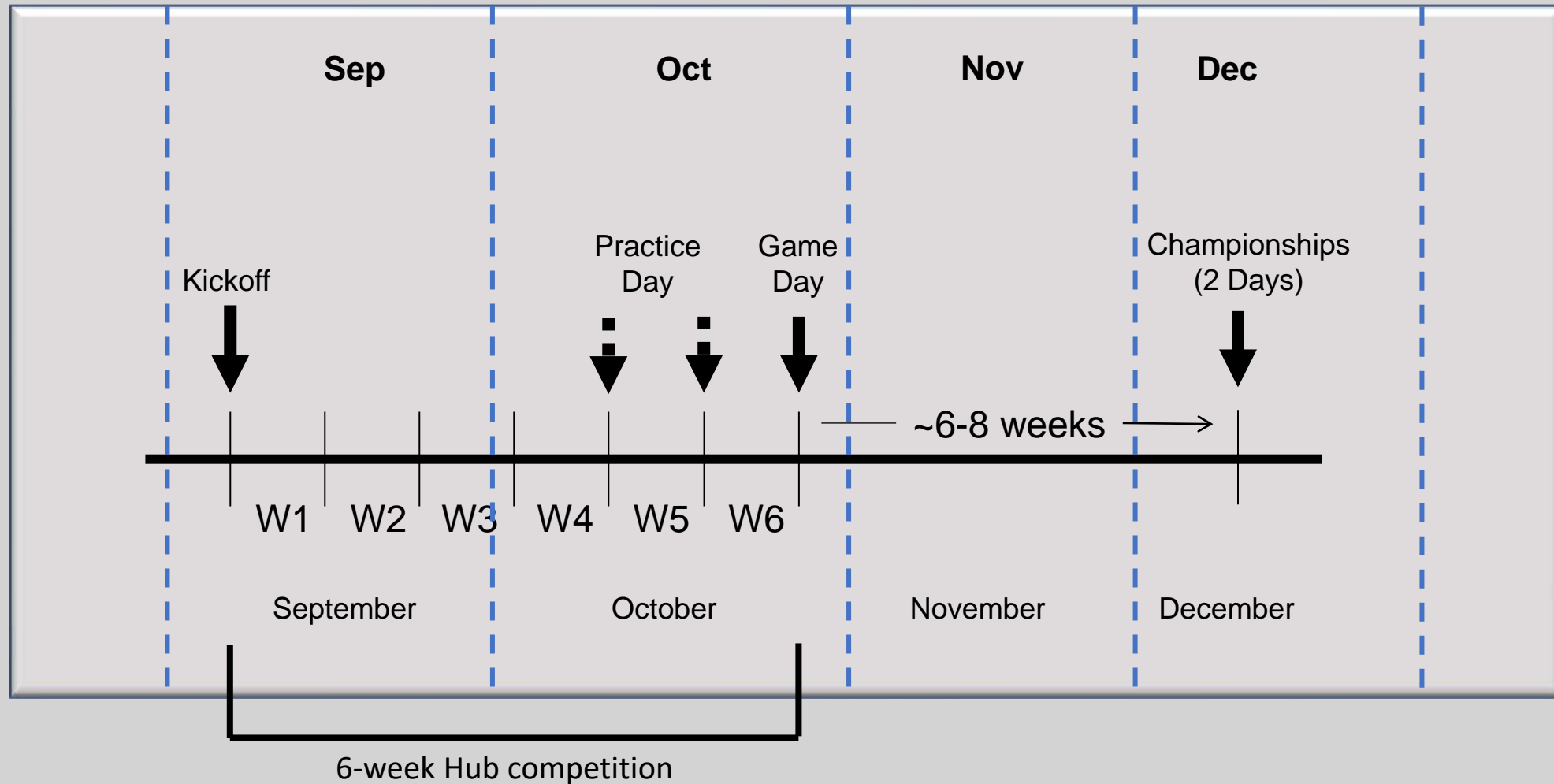


Competition Characteristics

- Common Characteristics
 - No registration fees or equipment (kit) costs
 - Open to Middle or High Schools
 - Public, Private, Charter, K12 and Homeschools
 - One team per school
 - No limits on team size, student age
 - All teams compete against one another
- Consistent and Educational
 - Same rules, same kit, same schedule
 - Emulates real-world product development
 - Design to Cost, Design to Function, Time to Market
 - Help solve an industry or global problem



Competition Schedule



Competition Formats

We've created Classroom and Online options to expand our BEST Robotics program while making it safe and accessible for students during these uncertain times.

Outbreak Hub 2020

*Go Head to Head
vs Other Robots*

- **NEW** Formats
- Same Legacy Competition
- BEST Award & Head to Head


Outbreak Classroom 2020

*It's BEST Robotics
On-Location*

- **NEW** Hub Provided Field Kit
- BEST Award & Robot Time Trials
- Streaming from the Classroom

Outbreak Online 2020

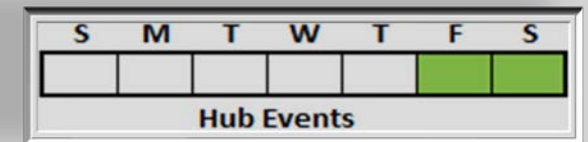
*3D Virtual Field -
Virtual Robot*

- **NEW** Online Skills Challenges
- Driver Controlled & Autonomous
- BEST Award & Virtual Robot Time Trials
-  Instant Replay  Highlight Videos

BEST Events

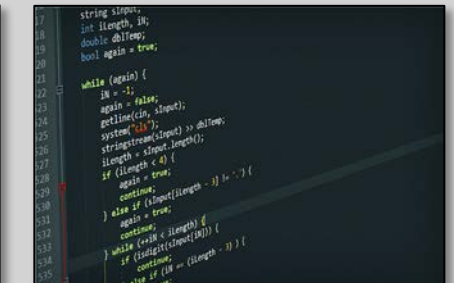
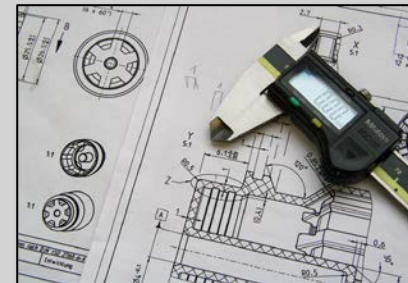
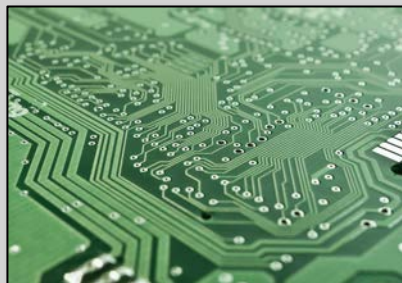
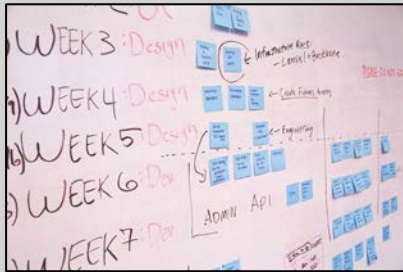
- Kickoff Day
 - Unveiling of game, rules and judging schedule
 - Distribution of Kits
- Practice Day
 - At least one practice day on the game field
- Game Day (1-2 days)
 - Head-to-head competition & BEST Award judging
- Championship (2-3 days)
 - Top teams in head-to-head and BEST Award advance
 - Game Day among championship teams

Typically Weekend Events

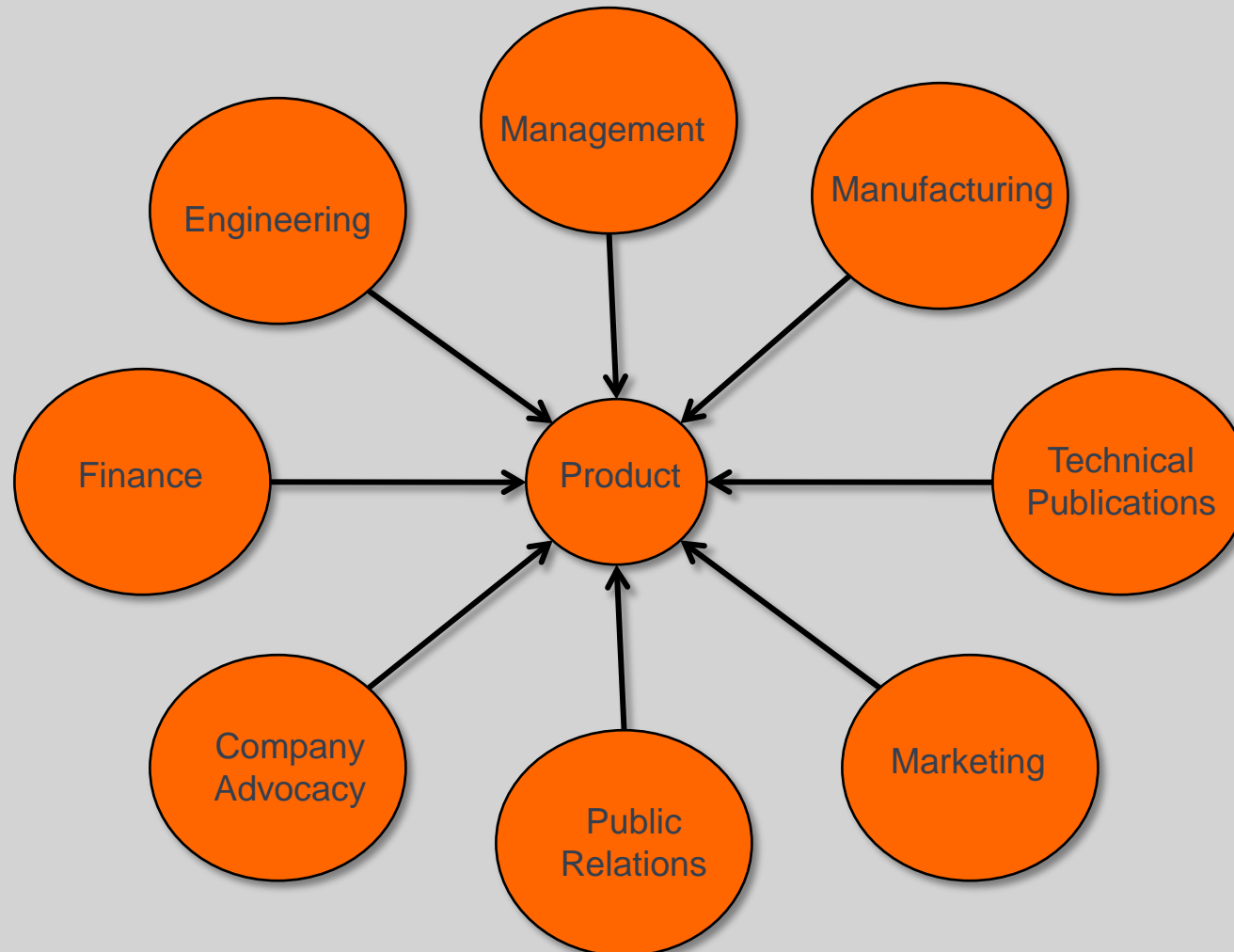


Emphasis is on a complete Product Development

There are many design disciplines involved in a successful product development.



Product Development Disciplines

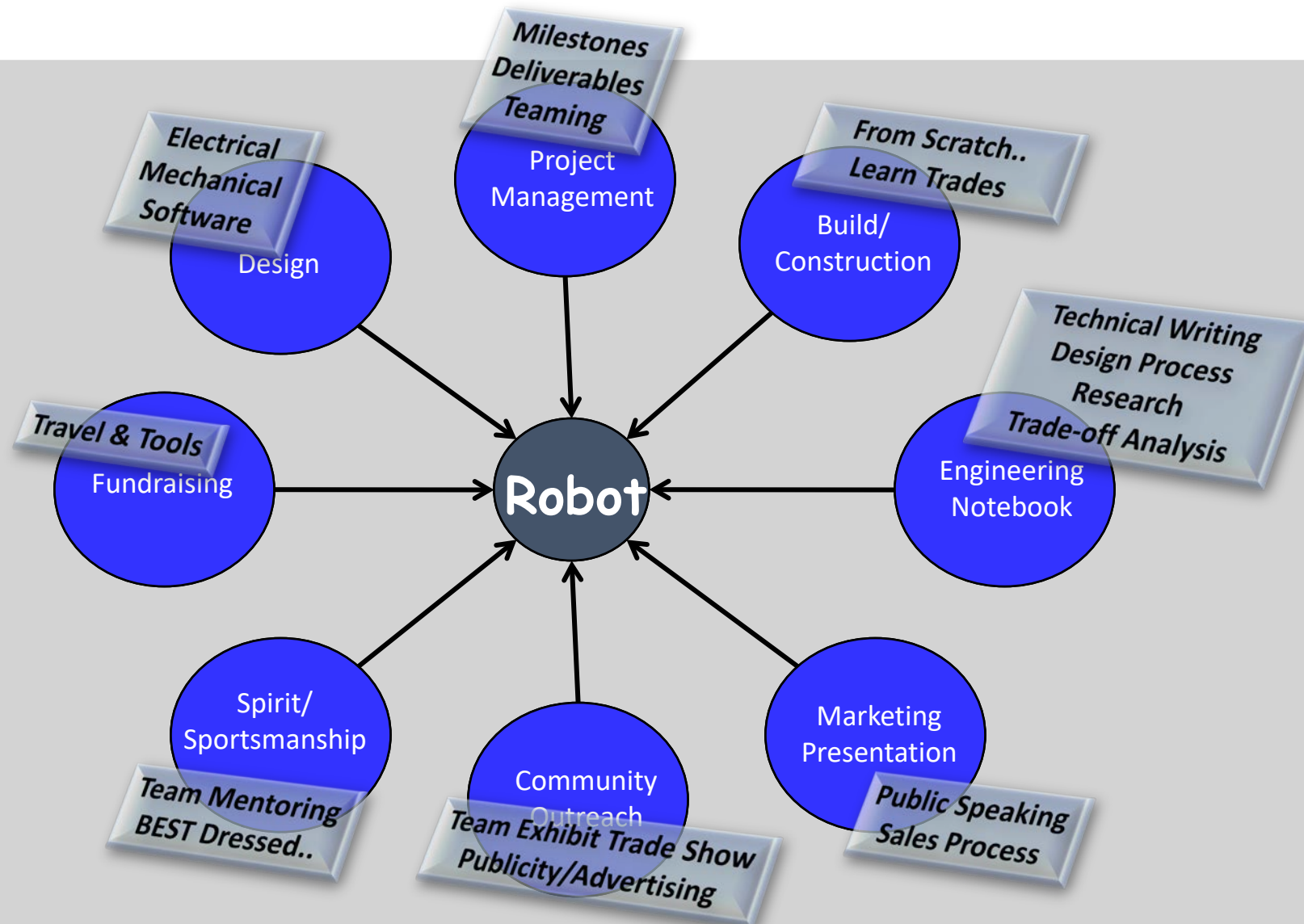


In The
REAL WORLD

Product Development Disciplines

BEST emphasizes each of these design disciplines during the competition

Product Development Disciplines



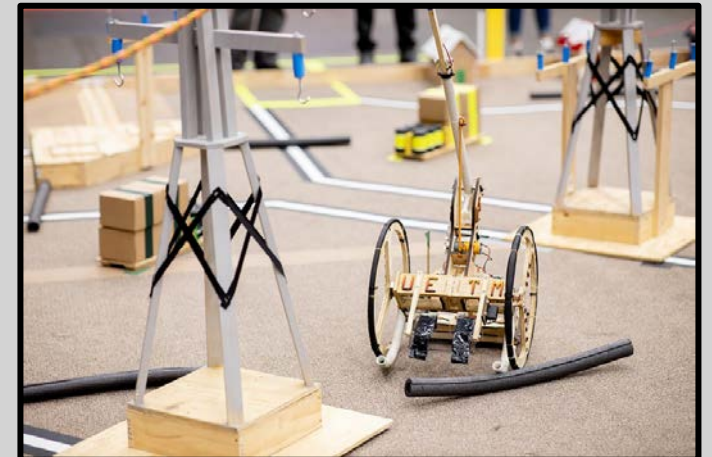
In The
REAL WORLD



In The
BEST WORLD

Head-to-Head Competition

- New educational theme/challenge and game field each year
- Challenge and field kept secret until Kickoff Day “unveiling”
- Playing field is typically 24’ x 24’ configuration
- Points awarded for successful completion of tasks
- 4 teams compete in 3-minute matches
- Progression
 - Round robin seeding phase (6-8 matches per team)
 - Wildcard phase (best remaining notebook scores)
 - Semifinals phase (8 or 16 teams)
 - Finals phase (4 teams)



Judged Activities

- Teams compete in the following required categories
 - Engineering Notebook
 - Marketing Presentation
 - Team Exhibit
 - Spirit and Sportsmanship
 - Robot Performance



- The BEST Award
 - Best overall score in all 5 categories

- Additional Design Awards
 - Most Robust Design
 - Creative Design
 - Simulink Design Award

The BEST Award

- The BEST Award is the “Top Award” in the competition
- Presented to the top 3 teams that best embody the concept of Boosting Engineering, Science and Technology through:
 - Teamwork
 - Diversity of Participation
 - Sportsmanship
 - Positive Attitude and Enthusiasm
 - School/ Community Involvement
 - Creativity
 - Application of the Engineering Design Process



Unique Skills Challenges

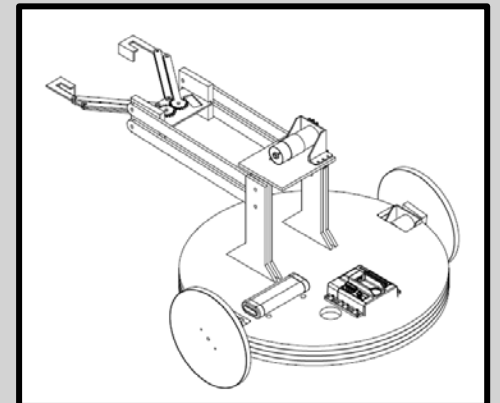
Minecraft Challenge



Video Design Challenge



Engineering Drawings Challenge



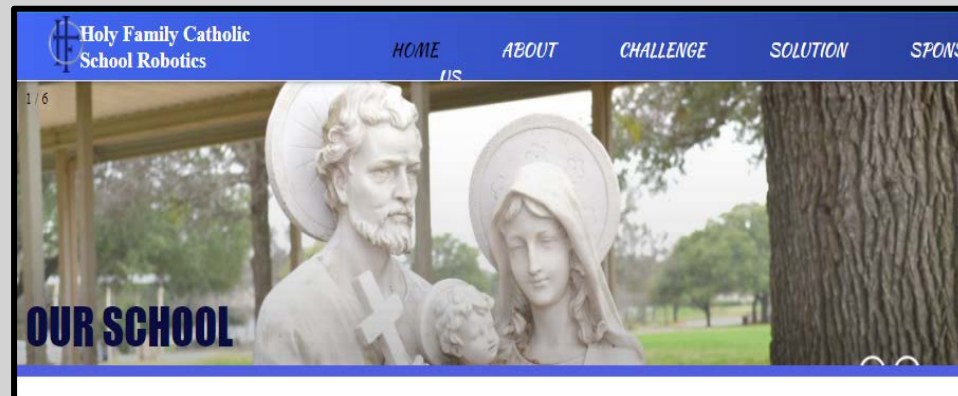
BESTMania Skills Challenge

Game Time Remaining: 4 days, 15 hrs, 15 mins, 48 secs
Question Start Time: 2020-09-13 09:41:18 | Answer Update Time: Pending
Question Number: 2 | Difficulty: Easy | Points: 1000 | Questions Answered: 0/24

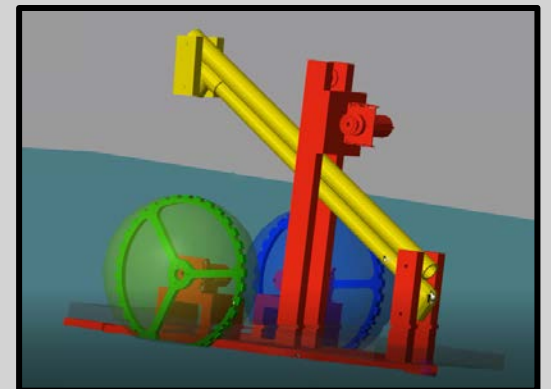
When a typing mistake is made in a source code it is called _____

- (A) A typo
- (B) An algorithm
- (C) A syntax error
- (D) A function
- (E) All of the above

Website Design Challenge



Robot Modeling Challenge



Industry Design Tools Available



Robotics “Kit” is Provided

- Returnables Kit
 - Loaned to the school for the duration of the competition
 - Electronics equipment used to power the robot
 - Microcontroller, motors, servos, batteries, sensors, wiring, etc.
- Consumables Kit
 - Expendable raw materials provided to the school
 - Materials used for construction of the robot structure
 - Plywood, PVC, metals, hardware, fasteners, miscellaneous

Basic Design Constraints

- Teams may only use the materials and quantities provided in the KIT!
- Only two team custom parts may be used
- Final robot must be no larger than 24" x 24" x 24"
- Final robot must weigh no more than 24 lbs.
- Parts, size, weight, and methods are verified prior to Game Day

Student Expectations

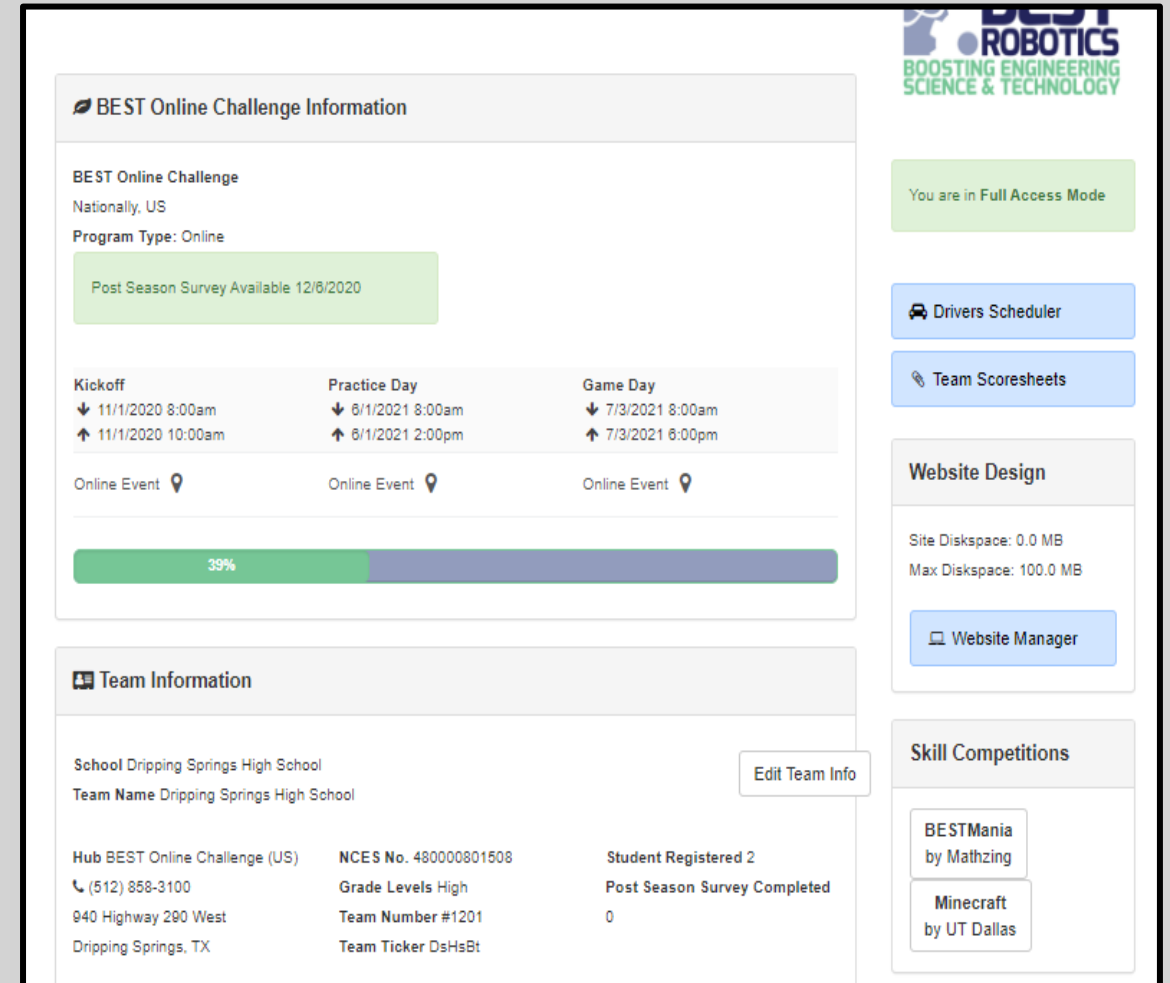
- Engineering Design Process
- Design & Construction
- Programming
- Driver-controlled and Autonomous Performance
- Documenting the design
- Marketing the design
- Publicizing BEST Robotics, the team, and the design

BEST National Registry

<https://registry.bestrobotics.org>

- Team Registration
- Participant Registration
- Competition Management
- Team Management & Access
- National Demographics, Surveys

	STUDENT	GENDER	PREVIOUS PARTICIPANT	GRADE LEVEL	PERMISSION	POST SEASON SURVEY	ATTENDING GAMEDAY	WORKFLOW ACCESS
⊕	Brown, Jim	M	No	8TH	✓	✓	<input type="checkbox"/>	None
⊕	Rocket, Johnny	M	Yes	12TH	✓	✓	<input checked="" type="checkbox"/>	Full Acx
⊕	Young, Halei	F	Yes	12TH	✓	✗	<input checked="" type="checkbox"/>	Full Acx
⊕	Young, Jenny	F	Yes	9TH	✓	✓	<input checked="" type="checkbox"/>	View O
⊕	Young, Valerie	F	Yes	11TH	✓	✗	<input type="checkbox"/>	None



BEST Online Challenge Information

BEST Online Challenge
Nationally, US
Program Type: Online

Post Season Survey Available 12/8/2020

Kickoff	Practice Day	Game Day
↓ 11/1/2020 8:00am ↑ 11/1/2020 10:00am	↓ 6/1/2021 8:00am ↑ 6/1/2021 2:00pm	↓ 7/3/2021 8:00am ↑ 7/3/2021 8:00pm

Online Event 📍 Online Event 📍 Online Event 📍

39%

Team Information

School Dripping Springs High School
Team Name Dripping Springs High School Edit Team Info

Hub BEST Online Challenge (US) (512) 858-3100 940 Highway 290 West Dripping Springs, TX	NCES No. 480000801508 Grade Levels High Team Number #1201 Team Ticker DsHsBt	Student Registered 2 Post Season Survey Completed 0
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Website Design
Site Diskspace: 0.0 MB
Max Diskspace: 100.0 MB
Website Manager

Skill Competitions
BESTMania by Mathzing
Minecraft by UT Dallas

Drivers Scheduler Team Scoresheets

You are in Full Access Mode

What Next?

- Become a Sponsor
- Register a Team
- Mentor a Team
- Volunteer
- Find an Event

<https://registry.bestrobotics.org>