

DESTINATION IMAGINATION CREATIONS



EGE SEÇGİN

WHAT IS DESTINATION IMAGINATION?

Destination Imagination (DI) is an international program that allows young people of all ages--kindergarten through university level--to be involved in creative problem-solving in the STEM fields (science, technology, engineering, and mathematics), fine arts, and service learning.

In this tournament, which we participated for 2 years, we chose to compete in the field of engineering because engineering was the most suitable for us as a team.

The challenges given each year change and we were always asked to combine what we wanted to produce with a theater play, at the same time, after presenting the theater we prepared and the things we created, we were trying to put on a theatrical performance with the materials given to us in a very short time without any preparation.

So, we were subjected to two types of evaluation, one for our main show and one for instant challenges, where we quickly created our roles and words using the materials they wanted on the subject they wanted.

After the evaluation of each age group is over, the top 2 teams from each country are invited to the finals held in America.

DI 2019

Teachers from our school formed a team that they trusted their creativity, theatrical talents and technical knowledge and this is how our adventure started.

Our challenge was to;

Design and build a structure that can support weight without breaking.

Test the structure by placing weights and then removing them.

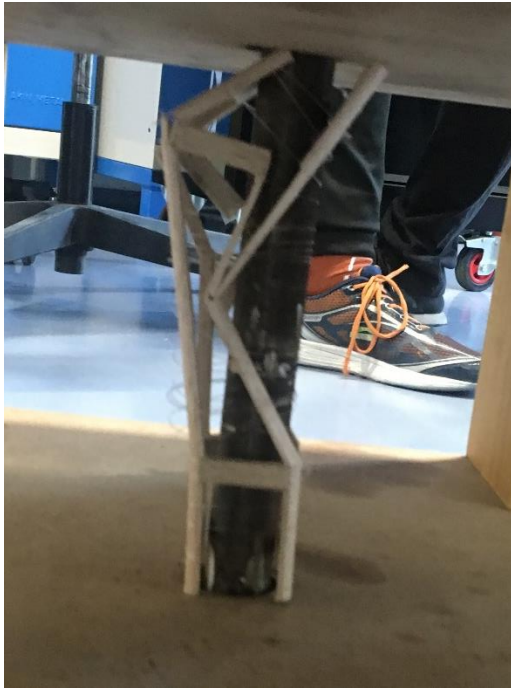
Create and present a story in which the sudden appearance of a monster has surprising results.

Design and create a special effect to enhance the sudden appearance of the monster and/or the events surrounding the monster in the story.

First we started to work on the structure that will carry the weight, since we will get more points if we make a structure that is as light and more weight-bearing as possible, we started to decide on the material and create the shape of the structure, my task was to find the most logical and feasible structure shape and 3D model it.

Here is the first failed prototype's video which only carried 80 kilos;





After a few prototypes, analyzing our mistakes and changing the material, we created a structure that is very light and can carry over 100 kilos ;



After the structure was finished, we moved on to creating our story and deciding what the name of our team would be.

While we were creating our team name, we all gave an idea and we had a collective discussion on which one could be better, and my idea, "Smells like team spirit", was liked by my team so we chose it, it was a very good decision for me who is a nirvana fan.

While creating our story, after a collective discussion, we decided on our main theme and settled on a classic-looking but extraordinary frog princess story.

Together we finalized story and everyone designed a decor or an outfit.

My mission was to design a dress for the princess and I made a seemingly normal yet absurd design.



a beautiful dress from plastic plates...

Because my team trusted my design perspective, they asked me to design the pins for pin swaps which is one of the DI traditions and the team t-shirts.



We used this pin design next year too.



I had to share the old version because I don't have any other photos.

We played our theatre and tested the durability of our build endless times and we were ready for the tournament.

The day of the tournament came and our preparedness made us feel very confident, but we were still extremely nervous.

Even though our instant challenges went very well, our friend's hand was shaking so much in our main theater because of how nervous he is, the weight slipped from his hand and instead of a slow release, the weight increased with gravity and created pressure at a single point of our structure, causing it to break.

We were all demoralized in the middle of our theater, as breaking our structure, which we were sure we prepared very well, would cause us to lose a lot of points, but because we planned such a scenario with my teammates, we welcomed it professionally and did not reflect it in our theater.

Thanks to this professional behavior, although we expected a much lower ranking, we managed to be sixth in Turkey and received the most creative team award. At the same time, I was personally very happy that the DI Turkey Instagram page shared the princess dress I designed and that people gave good reactions to my design.



DI 2020

We knew that we would be well prepared for the new challenge and how to manage our nervousness in this adventure where we were involved again as a more experienced team.

Our challenge was to;

Design and build a bridge with only playing cards and duck tape that will be assembled during the Presentation.

Move weight across the bridge to test its strength.

Create and present a story about an unexpected connection and its outcome.

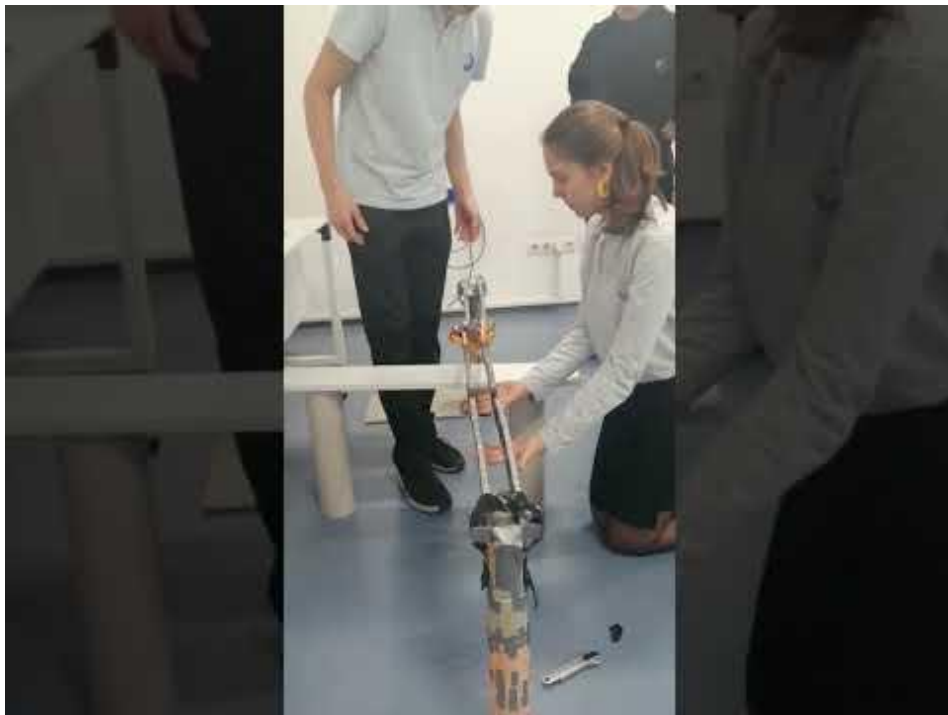
Since it was very difficult to make with only playing cards and duck tape and it could not be 3D modeled, we immediately started working on the bridge they wanted. We were trying to figure out what weight to use and what kind of bridge we should design to get the most points.

And I came up with an idea to design a rail system with the cards and design a robot as our weight that will follow the rail, so more points can be earned because the other teams will probably use stationary objects as a weight. Everyone liked the idea because it will be more impressive so we tried to build rail prototypes for it.



Weeks later, after a lot of prototyping, we were able to build a bridge with a stable rail system that could support the weight.

Now it was time to design the rail-following robot that would be our weight. My task was to design and solder the circuit to the created 3D body, although it had balance problems it could still cross the bridge.



We were going to try to fix it, but now we had to start writing the theater and create decorations for our play since this took us weeks.

We wanted to create a fun story but we didn't really have any ideas in mind, as we were thinking I thought about the dress I designed a year ago and said what a beautiful dress can be made from playing cards. Everyone agreed with me and we started to think about things with a princess in it and we decided on Mario.

We wrote a fun drama where Mario participates in a television quiz to save the princess.

It was time for the decorations and the details so we started with the backgrounds.





I was thinking of building a robot that would lift up Mario's questions with Its hands and I didn't want it to be fully humanoid, but I didn't know exactly what to do either. One day, one of my teammates said that he had a disco ball in his warehouse, and we laughed, then I said that I could use it as a head and I asked him to bring it. This idea, which came to my mind in a funny way, caused the robot that I was very happy to design.

It was very enjoyable to design its body and its circuit. The final version was really aesthetic for me. I must say that I am very proud with this design.



I used two servo motors which is controlled by Arduino to make it lift up and developed an app to control it via Bluetooth.

Even though I had the idea to make a dress out of playing cards, my teammates did almost all the work this time and they did a great job.

All the other costumes were ready and all we had left was the bridge that didn't work properly every time and it was very important in our score calculation.

We did some work on the bridge, created a stable and easy to assemble version now, it was working just as we wanted.



And the day of the tournament has come. We were very confident and ready.



Since one of our team members changed, we changed our old team name to Gone with the Win, inspired by the movie Gone with the Wind.

Our instant challenges went very well and our main play was also excellent. The robot crossing the bridge fell once, unfortunately, we got a little negative score because of this, but this did not prevent us from being the second in Turkey and we got the most creative team award again! We were called to the finals since we were 2nd but in 2020 due to Corona restrictions, it got cancelled.

Us being called out on stage.

