

21350C The Destroyers

Welcome to our Career Readiness Challenge project

Our Company - Universal Robots

Team members:

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Location of team: Trinity Preparatory Grammar School (Strathfield)

Note: this google slides is 984 words long



**UNIVERSAL
ROBOTS**



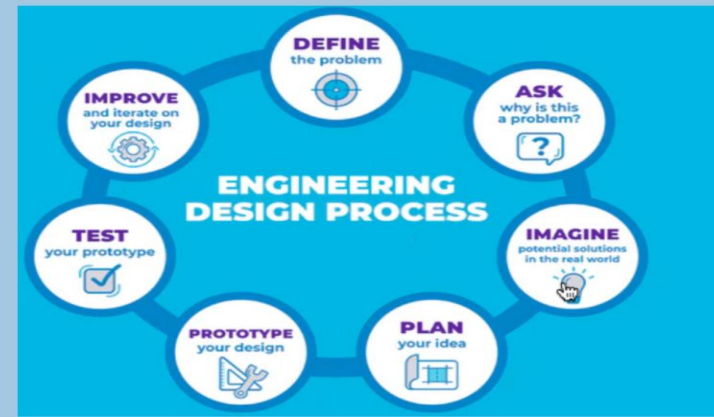
What is this company, and why did we choose it?

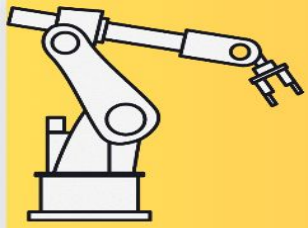
This company is a life changing robot builder that make replicas of human limbs such as arms, or parts of legs.They believe that using these tools, that we would be able to work alongside AI tech, not against. These amazing machines can do human jobs and support humans in everyday needs. They can be a significant step into the future and it can be made by things as simple as VEX.



What is the design process for Universal Robots?

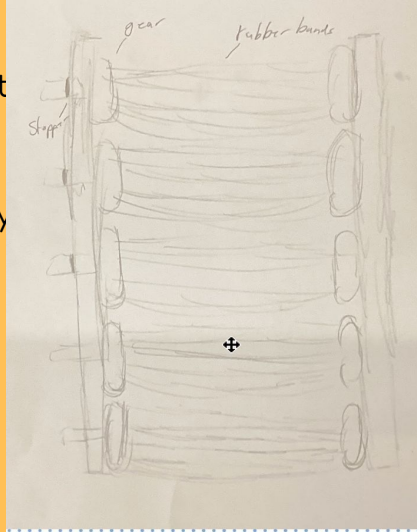
The Universal robots company has a very logical design process. They first define the problem, then ask what is the problem, then imagine potential solutions, then plan their best idea, after that, they make a prototype design, and then use that to test the prototype and see if it fixes the problem, if not, they go back to step 3 but if it works, they look for possible flaws in the system, after that, they finally make a real design and send the robots out for the world to use. It is a logical way to make a new thing for every new problems such as people with a disability, or someone that may need assistance in the house in making food, setting up a table for dinner or moving around. We believe, as The Destroyers, we think that this can relate to us on the playing field and would be explained a little more depth in the next page.





How does Universal Robot's design process connect to ours?

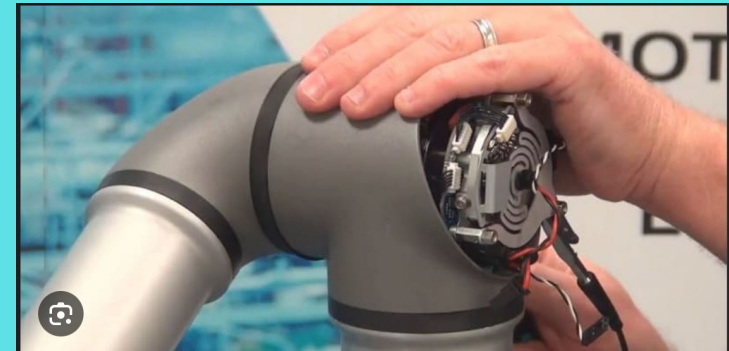
As said on the page before, Universal Robot's design process is define the problem, ask what is the problem, imagine potential solutions, plan the best idea, make a prototype design, test it and see if it fixes the problem, and finally build a real design. We have a graphic design person in our team. That helps us enormously because he can create a design that would help us on the playing field. We think about what is required on the playing field. We asked for this year, how can we make a system that would suck green blocks up quickly? We then made hand-drawn pictures that would show us what we have build. We were able to make a robot that eventually drew green blocks quickly and efficiently but took some tries.



From drawing, to prototype, to real design

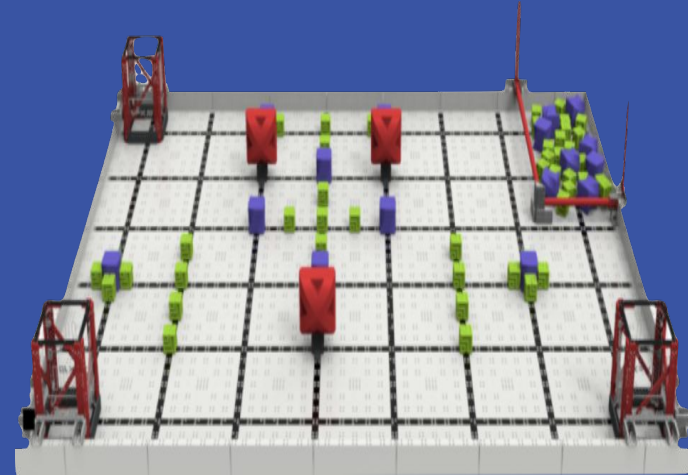
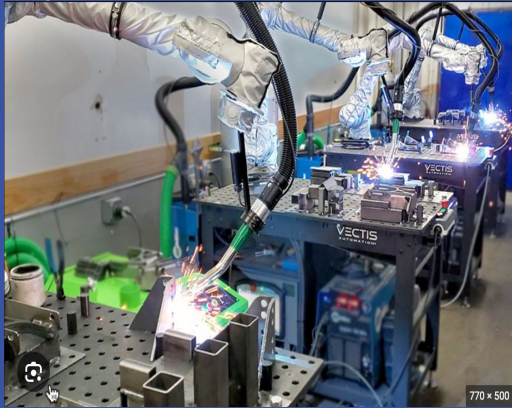
What resources does Universal Robots use?

What resources does Universal Robots use? Universal Robots use professional materials made from blocks of metals. We believe, that VEX, or other simple materials can be used to make these sort of automated, advanced robots in the making. VEX IQ can be made to do some simple tasks that the automated bots Universal Robots make using the VEX IQ. There are many different things that a VEX bot can do, like a claw-bot can be programmed to pick up something and drive it somewhere without having to control it. Imagine what we can do with that if we build it to a bigger size! We can be riding VEX cars, we can be making clothes with VEX machines, we can make automated humans made out of VEX! Using Universal Robot's designs and ideas, there are many things that we can make to help the world financially and physically too.



How does VEX Robotics prepare us for this?

VEX Robotics can benefit us in this company because VEX helps us think out of the box and make new things that would help us on the playing field. It is the same thing for Universal Robots. These employees think about people, what must be included to make things right, like a robot. Also, an important part is how VEX prepares us with the right knowledge to know about important things such as playing with electricity or connecting motors together. VEX will definitely prepare us for Universal Robots.



From the field, to the machine lab

Conclusion

VEX Robotics is an extraordinary way of building knowledge and strength in engineering and would enormously support people if Universal Robots advance into building automated robots. We believe that Vex can be used as a way for robots to work alongside humans. Humans give something to AI, AI give something to us. It is like a trade. VEX robotics will prepare us for this company as it sets us in the right mindset that you need to be to specialise in Engineering. Finally, We believe that the design process, define the problem, ask what is the problem, imagine possible solutions, make a plan for your best idea, make a prototype, see if it works, and make the best design for the real world. We believe that that is the mindset that we have when we are planning our next thing. Thank for reading this judges and please choose us for the 2023-2024 World competition.



Universal Robots



About the team

We are the 21350C The Destroyers. Here, we have Aden S,(on the Left) our log booker, builder, coder and organiser. We have Issac L, (In the middle) he is our graphic designer, coder, 2nd driver, organiser and logbooker. Finally, we Have Ryan N, (on the right) he is The Destroyers team captain, builder, part graphic designer, logbooker, part organiser, and 1st driver. We believe that AI will be able to work alongside humans. In peace. We believe that it would be a significant step into the upcoming future. We chose this mostly because we are a;; interested in autobots and how they work. We can imagine the idea of VEX IQ being a main resource of making AI robots.We hope you enjoyed our presentation.





**From 21350C The Destroyers
We hope you enjoyed!**