

Team #:	P21011	Team Name:	CHAD 1000						
Date:	9/2/20 8:10	Document Owner:	Hannah Husarek						
Revision #:	1								
ID	Category	Risk Item	Effect	Cause	Likelihood	Severity	Importance	Action to Minimize Risk	Owner
	<i>What type of risk is this?</i>	<i>Describe the risk briefly</i>	<i>What is the effect on any or all of the project deliverables if the cause actually happens?</i>	<i>What are the possible cause(s) of this risk?</i>	<i>L</i>	<i>S</i>	<i>L*S</i>	<i>What action(s) will you take (and by when) to prevent, reduce the impact of, and/or transfer the risk of this occurring?</i>	<i>Who is responsible for following through on mitigation?</i>
1	Resource	Teammates gets sick/catches Covid -19	Other teammates will have more work to do, hopefully we can work online.	We are in a pandemic	9	9	81	Continue to follow RIT health policy's	RIT
2	Resource	Cannot deliver on some CR because of patents or pre existing products	Come up with innovations or new ideas	Current products fulfill CR requirements	6	6	36	Team members will understand current patents	Jared
3	Technical	Hydraulic system from last year does not function	Project may be delayed while we redesign	It was rusting and sitting in a locker for 6 months	6	4	24	Plan for it not to work initially	Chad
4	Technical, safety	The device is not able to support the weight of the individual	The person could injure themselves	The material chose are not strong enough, the foundation of the device may not be stable enough	8	5	40	Do simulation in the CAD software to make sure the current design can hold up	Gina
5	Safety	User could fall if device moves too slowly/quickly	Person will be injured and possibly trapped on the floor	Unbalanced device	9	6	54	Test our product under various loads and constraints	Kaylie
6	Technical	Device failure could limit access to facilities	The person can no longer use the bathroom	Mechanical failure, Hydraulic failure	6	3	18	Run fluent test to make sure the device is reliable in the field	Kaylie
7	Safety, Technical, Environmental	Because of Covid-19, we could not be able to finish a working prototype	There is no working prototype, waste of time and money on materials	Global pandemic still in effect	9	9	81	Team wears masks and follows state and school listed mandates on social distancing	Kaylie
8	Resource	Materials may not fit cost requirements	Materials are to complex or expensive	Shipping cost might increase, using high end materials	9	6	54	"Team will do what they have to do, its a hustle" - Kaylie	Jared
9	Environmental, Safety	Sanitation issues can lead to bacteria build up and corrosion of materials	Device could break and become unusable, health risk to the user	Crevice in device difficult to clean, device life span significantly decreased	8	9	72	Test materials and minimize bacteria hotspots on the device	Kaylie
10	Safety, Technical	Device has pinch points	Person will be injured	Moving parts are poorly designed and do not account for the possibility of pinching	6	4	24	Be mindful of pinch points in the design phase	Chad
11	Technical	User has difficulty transporting the device	The time benefit of using the device will be reduced	Device is too heavy or unwieldy to transport to the restroom	5	7	35	Minimize material used and considere alternate materials	Chad
12	Safety	The material used in the device are not chemical resistant/bioresistant	Device would not be able to be properly sanitized	The material chosen	4	8	32	Research materials before use to make sure they are able to be disinfectant and sanitized	Hannah
13	Technical	Cannot operate with no/low water pressure	Cannot raise seat/clean and transfer process would be difficult	Plumbing issue, no power to toilet	3	9	27	Have a backup power supply, have a plumber on call	Jared
14	Resource	RIT wifi stops working during group work.	Cant do work on campus/in class	RIT servers go down due to weather or maintance	4	9	36	Plan to work remotely	Hannah

15	Technical	The team has trouble machining some parts due to complex geometry	Purchase replacement part or change desing	The team did not take manufauring into account when desinging	6	9	54	Keep machined parts to a general design and purchase more complex parts	Jared
16	Technical	Main design prototype fails and other parts that depend on it have to be redesigned	Revisit drawings and part that failed	The part design was not fully thought through	9	6	54	Make sure parts are tested prior to assembly	Jared
17	Resource	Client adds a requirement	need to got back and rethink de	Not clear communication with the the client	8	5	40	Keep in contact with the client throughout the design process	Hannah
18	Resource	Zoom stops working, when we have to go online	The team may not be able to meet with guide, client, other team member	Zoom is constantly having issues	9	3	27	Touch base through other means email, slack	Hannah
19	Technical	CAD files get lost	Project files need to be redone, costing valuable time	The program could crash or files get deleted accidentally	4	7	28	Save files regularly, make a backup of all CAD files	Gina
20	Technical	Once fabricated the team realizes that the designs are not realistic for the application.	The whole project would be need to be rethoug, may need to start from the building	Not enough concept evaluation in earlier phases	4	9	36	The team will make sure to choose concepts that are realistic	Hannah
21	Resource	Shipping time will be prolonged due to pandemic	prototype will take longer to assemble	The pandemic has altered shipping times and effency	7	6	42	Must order parts far in advance	Jared
22	Resource	Google services stop working	our files on the drive are inaccessible	hardware/software failure in google's data centers	1	9	9	Refresh the page	Bing/Yahoo
23	Resource	Can not work with an ID student on device design	Can not pick their brain for design ideas	They are busy or don't want to help us	3	3	9	Reach out to an ID student early before they become really busy	Kaylie
24	Technical	Product fails/fatigues over time	Becomes dangerous, cant support a person	Overuse, weight capacity is exceeded	6	9	54	Develope a way to fix or maintain the device over time	Jared
25	Safety	Device falls on a MSD team member	Possible injury or even death	It is pushed over	1	3	3	Be mindful of device balance during assembly/use	Chad