

Description of component, subsystem, or function	Symptom (what?)	Effect (so what)	Failure mode (why?)	Probability of failure	Severity of effect	Risk priority
Bandbeesten Piano Practice	Spinning the piano at correct speed.	Performance doesn't look as good.	Using a remote controller being moved by hand.	2	2	4
			Radio interference with surrounding objects.	2	4	8
Bandbeesten Piano Practice	Knowing when to start spinning and when to stop.	Piano player can't jump off when he's supposed to.	One of piano wheels isn't responding. Don't have any cue of when piano needs to stop spinning. Band could be off beat so sound cue could not match up.	3	3	9
				3	3	9

Piano player
messes up
so end of
song is
different
time.

3

4

12

		Very	Probable	Probable	Occasional	Remote	Improbable
		5	4	3	2	1	
Catastrophic	4	20	16	12	8	4	
Critical	3	15	12	9	6	3	
Marginal	2	10	8	6	4	2	
Negligible	1	5	4	3	2	1	

Severity of Effect

- Catastrophic** The failure causes substantial damage to the product itself or related items (including people), requiring repair.
- Critical** The failure causes significant damage to the product itself or related items, requiring repair.
- Marginal** The failure causes some damage to the product itself or related items, potentially requiring repair.
- Negligible** The failure causes no significant damage.

Probability of Failure

- Very Probable** Every time
- Probable** Most times
- Occasional** Observed multiple times during the project.
- Remote** Might be possible during the project.
- Improbable** Maybe observed once during the project or predicted to happen after hand off.

Remedial action	Probability of failure after action	Severity of effect after action	Risk Priority
Create a code that allows the piano to spin by itself at the correct speed.	1	4	4
Tune remote controller to specific bandwidth that no one else is on.	1	4	4
Calibrate all wheels before practicing to make sure there all working.	1	3	3
Have the piano player provide a visual cue of when to stop spinning.	2	2	4
Follow the band instructor and know when he gives a signal to stop.	1	2	2

Have a set time that it normally takes to play part and stop after that set time no matter what.

2

4



8

Total score before action	Total score after action was applied
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20

11

30

14