

**Start Date**: 9-13-2016 **End Date**: 1-25-2017

**PM**: Joey van der Bie & Bas Pijls van Kooten

Product Owner: Joey van der Bie & Bas Pijls van Kooten

Scrum Master: Axel Kiebooms

Scrum Team:

- Axel Kiebooms
- Michelle Rotter
- Wilco Wijdenes
- Arnout Schekkerman
- Nick Leijenhorst

## **Risks Analysis at Sprint 04**

TOP RISKS DURING SPRINT 04							
ID	Name	Description	Factor				
	Overwritten code	Correct code was overwritten with wrong one	20				
	CAD takes too long	The CAD takes too long to develop	20				
	Soldering	Soldering takes too long	20				
	Wrong UI design	The GUI of the frontend does not look like the GUI design	20				
	Schedules Respect	The teammember do not take seriously the schedule estimates and do not respect the plan making schedule estimates deprecated and useless	20				
	Internet	Connecting arduino box to internet	16				
	Schedule Estimates	Estimates were done badly or there was not enough information for proper estimates	16				
	Bugs/Defects	Users found undetected defects	16				
	Team communication	Team members do not spend enough time together and do not communicate	15				
	Methodology	Failure to follow the methodology designed by the scrummaster	15				

## **FULL RISK ANALYSIS** When? Name Description Prob Fact Mitigation ID Imp ability act or **Technical Risks** 0 0 5 Sprint01 Stability Technology Every decision about picking components lack adding technical components to Sprint03 the project should be discussed stability by the team members so it will be stable and not cause troubles in unexpected moments

	Internet	Connecting arduino box to internet	4	4	16	We need to prioritize our effort on developing an internet connection which is reliable and that participant can recreate at home otherwise a part of the scope of the workshop will not be worth it	Sprint03 Sprint04
	Technical changes	Technical changes impacts the project	0	3	0	Technologies used in the project should be compatible with previous versions and or other technologies, so we must choose it carefully, that it will not affect the project	Sprint01 Sprint02 Sprint03
Desi	gn Risk						
	Documentation	Inception documentation might take too long or be develop on odd data	0	5	0	We need to put emphasis on communication between team members but also with the client to be sure to make worth docs	Sprint01
	Scope	Error or omission in scope definition	0	5	0	The scope definition must be effect of the work of the team, so everyone have to share their fears and opinions while the scope is being defined. Brainstorming, studying about scopes of the successful projects, looking deeply into all matters that are included, these are the methods that project team should apply	Sprint01 Sprint02
	Scope2	Project team realised, that there were some activities which were not needed initially in the project but they became relevant	0	4	0	BE AGILE: the project should be done in a way that allows applying changes and performing additional activities easily: Team members should discuss about unplanned things that can occur in the latter stages of the project and be prepared for handling well with them	Sprint02 Sprint03
	Requirements	Requirements are incomplete or unclear	1	4	4	Before coding phase, project team should determine how does every part of application should look and work like then requirements should be specified with the adequate precision without ommitting details	Sprint01 Sprint02 Sprint03 Sprint04
	Integration	Failure to integrate components	4	3	12	Doing integration research before coding part, writing some basic integration components that will define integration in later stages of the project	Sprint03 Sprint04 Sprint05
	Requirements2	Project team misunderstand requirements	0	4	0	When ther are some doubt about project requirements, team members should discuss it and	Sprint01 Sprint02

						determine how each requirement refers to the project and why			
	Architecture	Architecture lacks flexibility	0	4	0	We can avoid lack of flexibility by appying design patterns which allow adding new functions to the product while not damaging existing ones. The box and the frontend / backend should be open not only for minor hotfixes but also for bigger changes	Sprint01 Sprint02		
Cont	ractual or Legal r	isk							
	Teacher rejects ideas	Teachers does not approve ideas	0	5	0	Constant communication of the project advancements with the teachers	Sprint01 Sprint02 Sprint03		
Sche	dule Risks								
	Schedules Respect	The teammember do not take seriously the schedule estimates and do not respect the plan making schedule estimates deprecated and useless	4	5	20	Team members should respect the plan agreed by the team during the scrum planning and/or other meeting. Tasks should be communicated to the rest of the team during the daily stand up or remotely if the daily stand up does not take place.	Sprint 03 Sprint 04 Sprint 05 Sprint 06		
	Schedule Estimates	Estimates were done badly or there was not enough information for proper estimates	4	4	16	Every decision about picking adding technical components to the projects should be discussed by team members so it will be stable and not cause troubles in unexepected moment	Sprint 03 Sprint 04 Sprint 05 Sprint 06		
	Metrics communication	The metrics necessary to produce the monitoring data necessary to make schedule estimation is not provided by team members making scheduling impossible	4	3	12	Team members should be aware, through a correct communication, of how to monitor themselves and the effort they need to achieve task in order to produce clever metrics. This includes taking project monitoring task seriously	Sprint 03 Sprint 04 Sprint 05 Sprint 06		
Qual	Quality Risks								
	Wrong UI design	The GUI of the frontend does not look like the GUI design	4	5	20	The front end needs to be develop while respecting the GUI designed during the mockup creation. The mockups have been developed upon the expectations of the clients, it is necessary to take them seriously!	Sprint03 Sprint04		
	Bugs/Defects	Users found undetected defects	4	4	16	TESTING! TESTING TESTING!	Sprint03 Sprint04		
	Bad gui	Users hate gui	4	3	12	A special communication should	Sprint02		

						be established with the client and through user feedbacks in order to make a GUI matching with users and client expectations	Sprint03 Sprint04	
Prod	Productions Risks							
	CAD takes too long	The CAD takes too long to develop	4	5	20	Enough time should be given to Nick to create the CAD in order to make him possible to hand in quality work	Sprint03 Sprint04	
	Soldering	Soldering takes too long	5	4	20	Enough time should be given to Michelle in order to solder all the components so she can do it on time	Sprint04	
	Components delayed	Components required for the workshop are late to be delivered	0	3	0	We need to pray for components to be delivered on time	Sprint02 Sprint03	
Tean	n & Managerial Ri	sks						
	Team communication	Team members do not spend enough time together and do not communicate	3	5	15	We should put emphasis on team building and communication plan in order to keep track of the team and achieve performant communication	Sprint02 Sprint03 Sprint04	
	Methodology	Failure to follow the methodology designed by the scrummaster	3	5	15	By education, studying and consulting with teachers and experienced people we can understand and use methodology as mean of help for our project in a good way	Sprint 02 Sprint 03 Sprint 04 Sprint 05 Sprint 06	
	Conflicting tasks	Due to bad communication, two different pair or team members work on the same solutions	0	4	0	We need to have a good communication plan for dealing with tasks	Sprint02	
	Team members eaten	Some team members might be too shy to express themselves and feel like their ideas or opinions are not listened	0	4	0	We should be careful that strong personnalities of our group do not speak for shyer team members and take time to give to anyone the time to express themselves. However, shy team members should also be pro active to express themselves	Sprint 01 Sprint 02 Sprint 03	
	Stand up meetings not respected	Team does not have daily communication	3	3	9	We should try to have daily communication, it is not that hard to communicate remotely in case we cannot attend a meeting.	Sprint 02 Sprint 03 Sprint 04 Sprint 05 Sprint 06	
	Assignements takes too long	Documentation required for the school	3	3	9	Strong schedule estimates, working longer than expected	Sprint02 Sprint03	

		assignments take so long that the project itself is delayed					Sprint04 Sprint05
	Lack of PM and control	Project team lack discipline, control and management	3	2	6	Holding a control talk every week or more often, determining rules that everyone must obey and respect	Sprint 02 Sprint 03 Sprint 04 Sprint 05 Sprint 06
	Team motivation	Team members are not enough motivated	3	2	6	We should keep motivation high by meetings not related to work, monitoring progression of the project and rewarding ourselves after reaching a milestone, splitting work time in a proper way (not too much, not too little)	Sprint 02 Sprint 03 Sprint 04 Sprint 05 Sprint 06
	Negative attitude	Team members with negative attitude towards the project	0	1	0	Team members should motivate each other by helping, being open minded. Appropriate usage of the group agreement can help!	Sprint01 Sprint02 Sprint05
Vers	ion Control Risks						
	Hardware destroyed	One of the hardware is destroyed and cannot be replaced on tume	0	5	0	Version control, keeping extra hardwares	Sprint03
	Documents losts	Important documents for the report are deleted by mistake	0	4	0	Strong rules for the use of google drive	Sprint02
	Overwritten code	Correct code was overwritten with wrong one	4	5	20	Strong rules and supervision of GIT use	Sprint03 Sprint04