

## First Meeting 19.03.2020-Thursday

- Select chairperson and recorder

Halil Uluoglu

- Assign 1 requirement and 1 sub-problem for each member to document

**Halil I. Uluoglu** - **Requirement:** 2.Shall allow experts on Earth who are not physically in the same space to collaborate and develop instructions for astronauts **Sub-Problem:** 2.Solution Instruction Developing

**Simon Plank** - **Requirement:** 5.Shall disinfect the fixed medical equipment at the level required for surgeries **Sub-problem:** 5.Disinfecting

**Lennart Jehle** - **Requirements:** 6.Shall work on Mars **Sub-problem:** 4.Assembling

**Erik Kalmar** - **Requirement:** 8.Shall have high redundancy **Sub-problem:** 3.Parts identifying

**Abrehalei F. Tela** - **Requirement:** 3.Shall minimize a chance of incorrect assembly; **Sub-problems:** 4.Assembling

**Lukas Mitmasser** - **Requirement:** 7.Shall have high robustness **Sub-problem:** 3.Parts identifying

**Masoud Rastgou** - **Requirement:** 1.Shall assist astronauts to repair robotic surgery equipment **Sub-problem:** 5.Disinfection

**Charles Rambo** - **Requirement:** 4.Shall minimize total time required to fix the medical equipment **Sub-problem:** 1.Status Report Producing

	1.Status Report Producing	2.Solution Instruction Developing	3.Parts Identifying	4.Assembly	5.Disinfection
1.Shall assist astronauts to repair a robotic surgery equipment					Masoud Rastgou
2.Shall allow experts on Earth who are not physically in the same space to collaborate and develop instructions for astronauts		Halil I. Uluoglu			
3.Shall minimize a chance of incorrect assembly					
4. Shall minimize total time required to fix the medical equipment	Charles Rambo				
5.Shall disinfect the fixed medical equipment at the level required for surgeries					Simon Plank
6. Shall work on Mars				Lennart	

				Jehle	
7.Shall have high robustness			Lukas Mitmasser		
8.Shall have high redundancy			Erik Kalmar		

- **Fix times for your team’s regular weekly meetings**  
Tuesday, 24th March - 04.00 pm

**Second Meeting 24.03.2020-Tuesday**

Assignments for this meeting:

- **Everybody introduces their problem documents to the team**
  - ☐ Everybody has introduced their individual “problem documents” to the team using Hangout connection. It took approximately one hour to present the documentations.
- **Team gives feedback about each document**
  - ☐ Some formative feedback has been given in particular documents.
- **If you didn’t fix the next meeting already do that**
  - ☐ Next meeting is 04.00 pm on Tuesday.
- **Record memo to google docs and share link at your team’s Slack channel**
  - ☐ Memo for today created and shared to the team via Slack channel of team.
- **Fix times for your team’s regular weekly meetings**  
Tuesday, 31th March - 04:00 pm

**Third meeting 31.03.2020-Tuesday**

Assignments for this meeting:

- **Everybody introduces their idea documents to the team**
  - ☐ Everybody has introduced their individual “idea documents” to the team using Hangout connection. It took approximately one hour to present the documentations.
- **Team gives feedback about each document**
  - ☐ Team gave constructive feedback to everybody. Some of the students need to redesign their assignments to meet the design specified by the teachers
- **Create the team’s morphological table**

**Morphological Table**

	Status report producing	Solution instruction developing	Parts identifying	Assembling	Disinfecting
Course	Video	Phone Call	Manual Search	Video Instructions	Boiling
Reference	Symbology and satellites	Simulations for same situations	2D-Barcode Alphanumeric	Robot Crane	Chemicals, germicides
Idea 1	Optical Satellite	Using compression algorithms to send files	2D-camera to sense parts	Vice	Ventilation sensors
Idea 2			360° 3D-Cameras	"Glue" surfaces	Use Mars-environment
Idea 3				3d printing parts and tools.	
Idea 4				XR/VR instructions	

- If you didn't fix the next meeting already do that

☐ Next meeting is 04.00 pm on Tuesday.

#### **Fourth Meeting 02.04.2020-Thursday**

- **Select three concept using team's morphological table**

Concept 1: Charles and Masoud

Optical Satellite-Using compression algorithms to send files-360° 3D-Cameras-3d printing parts and tools-Chemicals, germicides

Concept 2: Halil and Simon

Video-Simulation for same situation-2d barcode alphanumeric-Xr/Vr instructions-Mars Environment

Concept 3: Lukas, Lennart, Erik

Symbology Satellite-Phone Call- 2D Camera to sense Parts-3d-printing-Boiling

- **Fix times for your team's next meeting**

Tuesday, 7th April- 02:00 pm

#### **Fifth Meeting 07.04.2020 - Tuesday**

- As team1, we divided 3 sub-groups and we assigned one concept for each sub-groups. In this meeting, we presented our documentation to the group.
- We have a total 88 primary and secondary causes for People, Equipment and Environment categories.
- We combined three documents into one document. For this document [click here](#).

- **Fix times for your team's next meeting**

Tuesday, 10th April- 02:00 pm

## Sixth Meeting 10.04.2020-Friday

### TEAM 1 PUGH TABLE

Requirement	Importance	Reference: Symbology and Satellites+Simulation for same situations+2D barcode Alphanumeric+Robot Crane+Chemicals,germicides	Concept 1: Optical Satellite+Using compression algorithms to send files+360° 3D- Cameras+3d printing parts and tools+Chemicals, germicides	Concept 2: Video+Simulation for same situation+2d barcode alphanumeric+Xr/Vr instructions+Mars Environment	Concept 3: Symbology Satellite+Phone Call+2D Camera to sense parts+3d- printing+Boiling
1.Shall assist astronauts to repair robotic surgery equipment	3		+1	+1	+1
2.Shall allow experts on Earth who are not physically in the same space to collaborate and develop instructions for astronauts	2		0	+1	0
3.Shall minimize a chance of incorrect assembly	2		+1	+1	0
4.Shall minimize total time required to fix the medical equipment	1		-1	0	-1
5.Shall disinfect the fixed medical equipment at the level required for surgeries	2		0	+1	-1
6.Shall work on Mars	3		0	+1	0
7.Shall have high robustness	1		+1	0	0
8.Shall have high redundancy	1		+1	0	+1
TOTAL		0	6	10	1

## Individual

- Write a weekly report before your next meeting
- Attend meetings

## Team

- Have at least one meeting before Wednesday workshop
- In this meeting apply new meeting structure using the weekly reports
- Write the team meeting memo following the new meeting structure and share the link to it
- Create the Team PUGH table and the associated Evaluation Document using the concepts generated last week(at least 3 concepts)
- Create evaluation table
  - Concept 1: Charles and Masoud: Symbology Satellite-Phone Call- 2D Camera to sense Parts-3d-printing-Boiling
  - Concept 2: Halil and Simon: Optical Satellite-Using compression algorithms to send files-360° 3D-Cameras-3d printing parts and tools-Chemicals, germicides
  - Concept 3: Lukas, Lennart, Erik: Video-Simulation for same situation-2d barcode alphanumeric-Xr/Vr instructions-Mars Environment

## • Fix times for your team's next meeting

Tuesday, 14th April- 02:00 pm