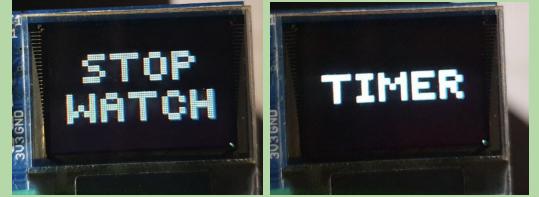


Feature	Feature Marks For	Input Devices	Feature Description	Images / Photo
Sound activated stopwatch	Tai	SW0, PBC, SW4,	<p>SW4 is on.</p> <p>Press PBC to reset first. A stopwatch that counts from 0 second to 100 minutes in real time. The time will be displayed on the seven segment display with the format mm_ss. It is activated and stopped by using a clap.</p> <p>To reset, after stopping the stopwatch, press PBC to reset the time back to zero. All switches have to be off for stopwatch mode.</p> <p>SW4 serves as a hard stop, and should be turned off when exiting stopwatch/timer mode.</p>	
Sound activated timer with timesetter	Tai	SW0, PBC, PBU, PBD, SW4	<p>SW4 is on.</p> <p>Only SW1 has to be switched on for timer mode. Press PBC to reset first.</p> <p>Similar to the stopwatch, the timer is sound activated as well.</p> <p>Users can set the countdown time by pressing the PBU or PBD for up and down (1 minute) respectively. Once the time has been decided, clap to activate the timer.</p> <p>Clap again to stop. PBC to reset the timer.</p> <p>SW4 serves as a hard stop, and should be turned off when exiting stopwatch/timer mode.</p>	
Stopwatch/Timer mode Graphical Visualisation	Tai	SW0	The OLED Screen will display STOPWATCH or TIMER depending on the mode selected (SW0 off for stopwatch, SW1 on for timer)	
LED Volume indicator with 16 levels	Tai	Mic	The sound levels will be represented on LED0 to LED15 in real time.	
Position Indicator	Dillon	PBD, PBU, PBR, PBL, SW15	Using a mock-up of a topographical map on the OLED display, a user can use the Push Buttons to track and indicate their position (blue pixel) on the screen. Each push of the push button is about 100m in the direction of the button. With North being PBU, East being PBR etc. The colours of each area on the topographical map will indicate its elevation, with the elevation increasing as the colour shifts from green to red.	

Elevation Indicator	Dillon	PBD, PBU, PBR, PBL, SW15	Using the 7 segment display, the user's approximate elevation, according to their position on the OLED display will be shown. The elevation is shown at intervals of 0, 50, 100, 150 and 200m.	
Route setter/Tracker	Dillon	PBC, PBD, PBU, PBR, PBL, SW14	By turning on switch 15 and turning on switch 14, the user can also indicate the route	
Start Position Picker	Dillon	SW1, SW2, SW3, PBC	By turning on switches 1, 2, 3 or none at all, the user can also choose their starting position on the map, in the event that the real life location has different entrances and starting points.	
Borders	Dillon		Green border of 1 pixel, orange border of 1 pixel and red border of 3 pixels are created.	
Bars	Tai		Green bar of 60X38 pixels, orange bar of 60x24 pixels and red bar of 60x10 pixels are created.	
Real-time audio volume indicator	Team	SW5	When SW5 is switched on, it changes to the real-time audio volume indicator mode. Green bars and pixels represent a low volume, Orange represent moderate volume and Red represent high volume.	
System Integration	Team	-	Individual features are integrated into a working bitstream.	