

... AND WALLS HAVE EARS

	Name	team	Purpose	Experience	What needs to be sensed	What is the result	Possible sensor strategies (GCS discussed with Davide Rochesso)
1	Tree of Life	Benito, Pamela	Interactive guide for visitors to the ghetto	Projection on the ground: visitors interact by walking on a projected timeline. 6 different spots activate different animations, with audio via bluetooth headsets	Position of the person on the timeline (6 sections).	Triggers animation; plays audio.	Ultrasonic rangefinders.
2	Aequilibrium	Margherita, Marco	Keeping the lagoon in equilibrium: understanding the effect of human actions such as fishing, noisy boats, pollution, etc	Water and fish swimming are projected on the ground. People are tracked as they walk and the noise they make is sensed. If they stay still and quiet fish swim towards them and around their feet. If they move the fish run away. If they make a lot of noise the fish die.	Position of person/s. Amount of noise/activity they are making.	According to position, fish will come up to you; according to noise and disturbance, fish will swim away. If disturbance is great, they will die.	Or photodiode sensors on 2 sides of the space Or pressure sensors under tiles. Marco is evaluating pros and cons. Microphones
3a	WAV	Francesco, Nicola	Many vaporetto stops are not visible from very far away, so you can't see if you should hurry to catch the boat.	A 'wave' of lights on the wall of the long alley leading to the vaporetto pier starts one minute before the vaporetto arrives. You must keep up with it to be in time to catch the vaporetto.	The vaporetto leaving the previous stop.	The wave starts quietly when the vaporetto leaves the previous stop. The wave gets big when you need to hurry to catch it.	Sensor to check vaporetto leaving previous stop (not necessary for prototype)
3b	WAV		Who is hurrying down the alley on the way to the vaporetto?	This part of the installation is in the vaporetto stop. As the vaporetto leaves the previous stop, music starts to sound. It takes the beat of the speed of the people walking in the alley. As more people hurry down the alley, more instruments are added to the mix.	The speed of the people walking in the alley.	The BPM (beat per minute) of the music changes accordingly. The more people there are, the more instruments there are.	NB PLAN TO MAKE 1:10 SCALE MODEL (1.3 mt long) Photo diodes to sense speed of walkers.
4	Secret garden	Giovanna	Seen from the air, Venice is full of gardens. But on the ground they are hidden from view. This installation aims to give you a sense of the existence of these hidden gardens, while avoiding any problems of privacy.	These installations will be in openings in the walls of gardens. As someone approaches, a back-projection of a garden scene will start; as they approach more closely some glimpses of something will flash into the scene. (This part is not yet completely resolved.)	The passing of a person.	Triggers a video.	Infrared sensor
5	Talking bench	Alessandra, Tamara	Visitors to Venice get tired and lost! The talking seat tells you where you are and gives you information about what you are looking at.	As you sit down, the seat tells you, through speakers at the top of the back, where you are. The seat swivels. As you turn, the system knows your orientation and tells you about what you are looking at. There are silent sections between each sector so if you don't want to listen you can have silence. An RFID sensor identifies your tourist card and switches language.	a) a person sitting down b) which way the seat is facing	a) audio telling you where you are. b) audio telling you what you are looking at.	a) pressure sensor b) potentiometer
6	FlyerCafé	Davide, Luca	All around Venice there are flyers—advertising apartments for rent, concerts, lectures, political meetings, etc. FlyerCafé brings them into the bar, allowing playful as well as useful interaction with virtual announcements.	When you order a drink at the bar, you can ask for a cup or glass of a particular type: concerts, apartments, and so on. When you put your drink down on the back-projected surface flyers of the category you have chosen cluster around the cup. You can browse them, enlarge them and print those that interest you.	a) different coloured cups or glasses. b) the finger of a person.	a) flyers float towards the cup b) people can drag the flyers towards them	The team is using the reactable system of video recognition and have it working. It works well for cups, etc but not for fingers.
7	That sinking feeling	Miguel, Nunzia	From time to time, Venice floods: 'alta marea'. <i>That sinking feeling</i> tells you how far up your trousers the water will come.	<i>That sinking feeling</i> has two locations: one at home, one in public locations like the station. If flooding is likely, a beam of light is projected onto your legs—indicating whether your boots will be sufficient, or you are better just to stay at home for a few hours.	a) if a person is there. b) needs data from the web about high water	a) starts the light projection b) according to the data from the web two indications are projected: level now and level at the highest (if water is rising) or lowest (if falling). Different parts of the city might also be indicated (which have different flooding levels).	Team imagines using laser light. Not clear yet exactly how these will work. Will need some kind of presence sensor.

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	Name	team	Components needed	Wiring board	Projector	Other equipment	Prototype	Location for prototype	Supporting material
1	Tree of Life	Benito, Pamela	Ultrasonic sensor;	1	1	Bluetooth headset; Mirror to increase size of projection; Support for projector; Extension lead for projector;	Hang projector in studio	Photostudio? Share with Aequilibrium?	Video of complete tour
2	Aequilibrium	Margherita, Marco		1	1	Mirror to increase size of projection; Support for projector; Extension lead for projector; White stuff for ground;	Hang projector in studio Floor sensors: type not yet decided	Photostudio? Share with Tree of Life?	Demo of columns graphics
3a	WAV	Francesco, Nicola	blue leds number?	1		Table for model; White card/foamcore for model; Lego technic to move people	1:10 model	Studio	1 element actual size Animation of photo showing moving wave
3b	WAV		fotodiodes number? 30? Speakers (OK)				Music to be composed	Studio	Music
4	Secret garden	Giovanna	Infrared sensor	1	1	Back projection screen; Tower for projector; Speakers	Large photo of wall/window to mounted on door of studio. Projector behind.	Studio door	
5	Talking bench	Alessandra, Tamara	a) pressure sensor b) potentiometer	1		Speakers (wireless?); swivel chair; circle on the ground to indicate active areas; clothes for chair: base and back	Use swivel chair	Studio	Video; Interviews
6	FlyerCafé	Davide, Luca	none	0	1	webcam (gillian's); mirror	Bar to be constructed	Studio	Photos of context
7	That sinking feeling	Miguel, Nunzia	not clear yet	1?	?		Not clear yet	???	???