

Assessment component 02: Oral assessment and presentation

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BA Product Design

Brief description

Improving the lives of blind and partially sighted people in their everyday life's.

Background information

- Almost two million people in the UK are living with sight loss. Approximately one person in 30
- Age-related macular degeneration, glaucoma, cataracts and diabetic retinopathy are by far the leading causes of blindness

(RNIB, Key information and statistics, 2014)

Future Projections

- Increased underlying causes of sight loss, such as obesity and diabetes. Means that, without action, the numbers of people with sight problems in the UK will increase.
- By 2020 the number of people with sight loss will rise to over 2,250,000.
- By 2050, the number of people with sight loss in the UK will double to nearly four million.

(RNIB, Key information and statistics, 2014)

01 Focus Group Meeting



- Aim was to obtain an insight into patterns, trends, opinions and feelings of partially sighted people.
- Participants varied from people who've been partially sighted for years to some who've only recently developed an eye condition.
- Focus group included seven individuals of different age and background.

Participants

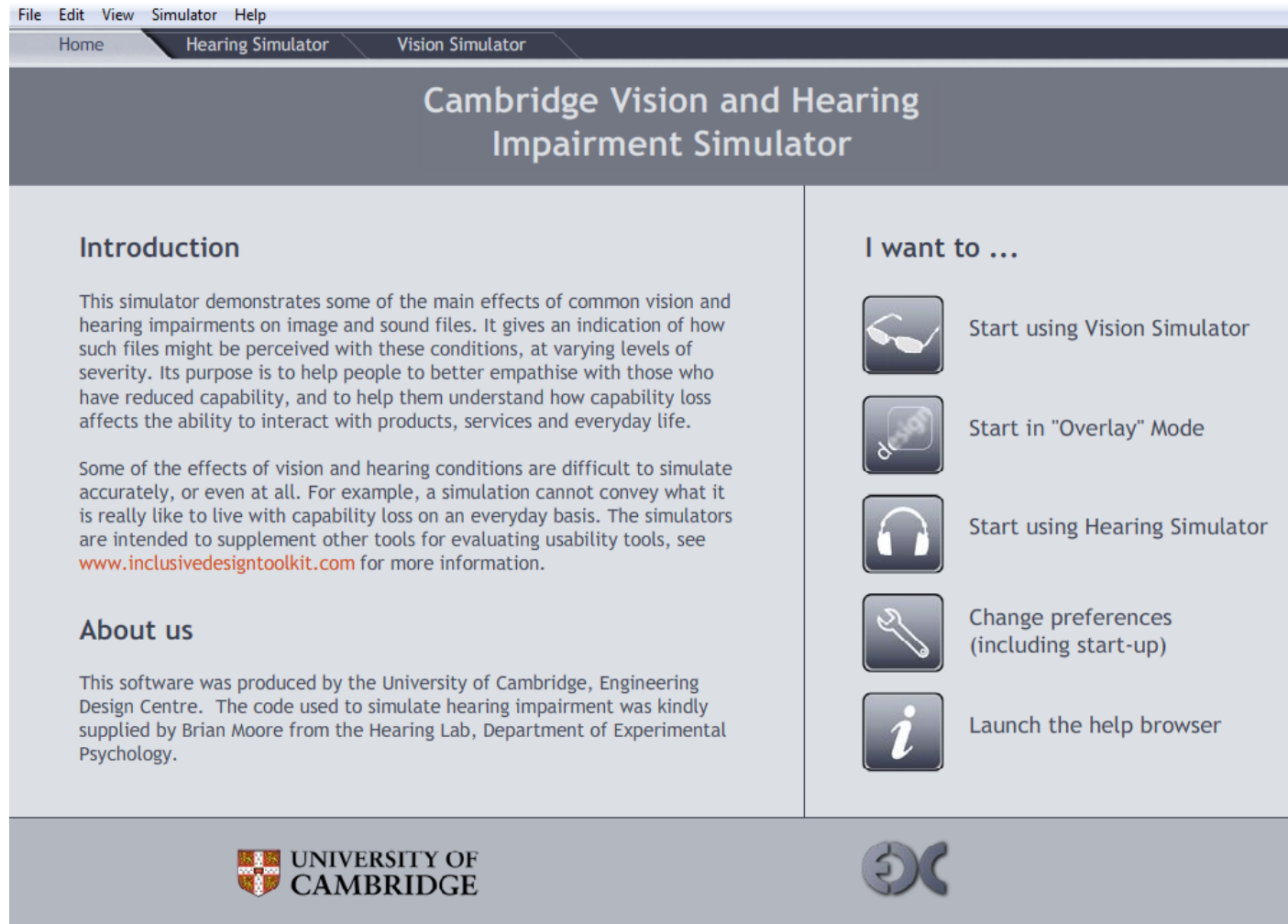


Anita	Peter	Paula
45 years old	57 years old	43 years old
Partially sighted	Macular Degeneration	Macular Degeneration & Diabetic retinopathy
RNIB Volunteer who runs 'Finding your feet' sessions	Former taxi driver	Enjoys Baking
	Lives alone	



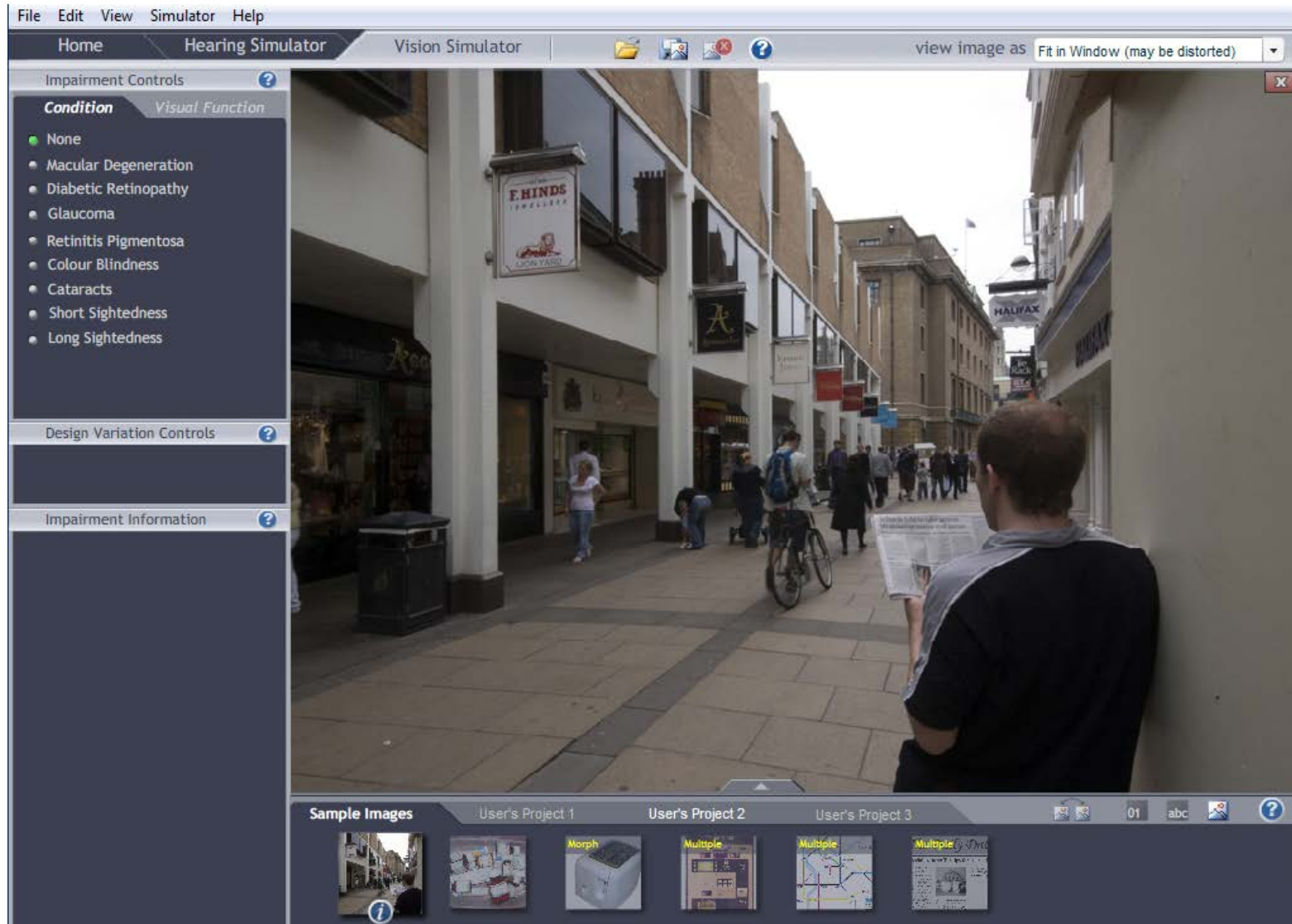
Andrew	Michael	Angelina	Lydia
40 years old	70+ years old	70+ years old	43 years old
Optic nerve damage	Macular Degeneration	Glaucoma & Cataracts	Diabetic retinopathy
Enjoys computing	Law graduate	Moved to the UK at the age of 26 from Nigeria	Retired Nurse
Xbox enthusiast & gamer	Sports fanatic		RNIB volunteer
			Originally from Nigeria

Simulating participants eye condition



<http://www.inclusivedesigntoolkit.com/>

Fully sighted simulation





Macular Degeneration

Peter
Paula
Michael

Affects the central field vision



Diabetic Retinopathy

Paula
Lydia

Contrast sensitivity loss & visual acuity



Glaucoma

Angelina

Peripheral vision loss



Cataracts

Michael

Angelina

Contrast sensitivity loss & visual acuity loss

Question 01: What 'annoys' you or have difficulty doing in your everyday lives?

Peter: "time" everything takes much longer, "when shopping for food it takes longer".



Paula: her love for baking has become difficult because using the "measuring jug" requires Paula to use her magnifying glass.



Angelina: "putting the pot on the hob" Angelina finds it difficult and hazardous to locate the cooker hobs.

Anita: "Being prepared and planning". Anita explains how being blind or partially sighted requires them to plan most things ahead.

Question02: Is there anything you enjoyed doing before your eye condition that you are unable to do or find difficult?

Peter: "I miss touring and caravanning " peter is unable to do his hobby as he once did. In addition, he states making a cup of tea is time consuming and harder.



Paula: "reading and cooking" Paula explains how cooking is harder because she's "unable to see if it's cooked".



Andrew: enjoys going places and travelling which requires him to use the bus. This is made harder by the fact, Andrew is unable to read the bus number until its last minute.

Michael: Walking and taking a stroll around town has become dangerous and Michael feels anxious when crossing the road.



Angelina: Enjoys shopping, because she is able to leave the house where she's able to see and talk to people. However, Finds difficult when having to pay for the items. Struggles to use the chip and pin machine. "Don't like using my magnifying glass because people might be behind me"

"end of life, until going out and meeting people" "not alone in the world"

Focus group findings

- Independency is important
- Being able to do everyday things such as cooking gives them a sense of equality
- Eye condition should not alter a persons hobby or the things they once enjoyed or restrain them from new activities
- Majority of products have little thought for partially sighted people who perceive their surroundings differently
- Kitchen appliances are designed to be visual. Placing pots and pans onto hobs requires good visual understanding.

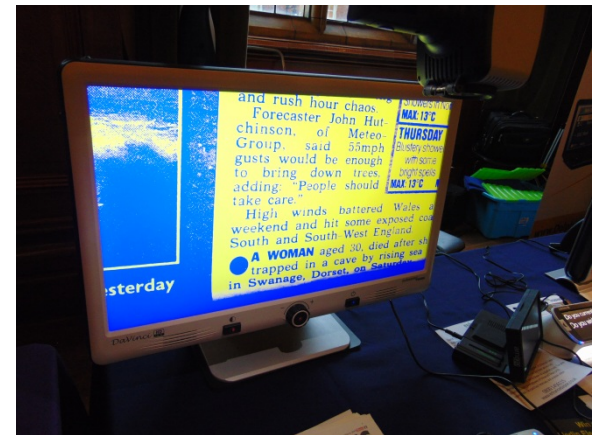
Hereford Technology Day For Sight

- Hereford town hall was the venue for sight and sound impairments convention, where different tech companies gathered to show their products.



Reasons for attending

- Understanding how others have made their products to cater for vision impairments
- Existing products that solve issues identified in focus group
- Is there space in the market for a new product



Conference was full of products that magnified text to help users with reading



All products seen had larger buttons that were of bright colours, to uncamouflage them from their surroundings.

They had different textures and made from different material to inform in a tactile way.



None of the products had aesthetic appeal. Products such as the radio looked utilitarian and did not follow any current fashion trends, which are in the market for fully sighted people. Not much thought was put into aesthetic styling.

Visual language research

Joseph Joseph



Reasons for doing visual research

- Partially sighted people have as much right to be surrounded in beautiful products
- An eye condition should not interfere with a persons taste
- When partially sighted people use for the blind products it creates a second class citizen feeling
- Friends and family of partially sighted people are usually fully sighted which means their aesthetic taste shouldn't be compromised



Different colors to indicate different meanings. Raised simple symbols that communicate quickly. Tactile symbols allows even the severely blind to recognize



Using untraditional materials for common issues

Rubber darker rim used for comfort, tactility and colour within stands out more. Uncomoflages product



Cooking

Reasons for choosing Cooking area to target

- Substantial issues that need to be solved that would improve the daily tasks of a partially sighted and blind person.
- Scope for a product that would be meaningful in terms of giving back independence and generate confidence
- Product will allow user to carry out their once hobby again without feeling incapable

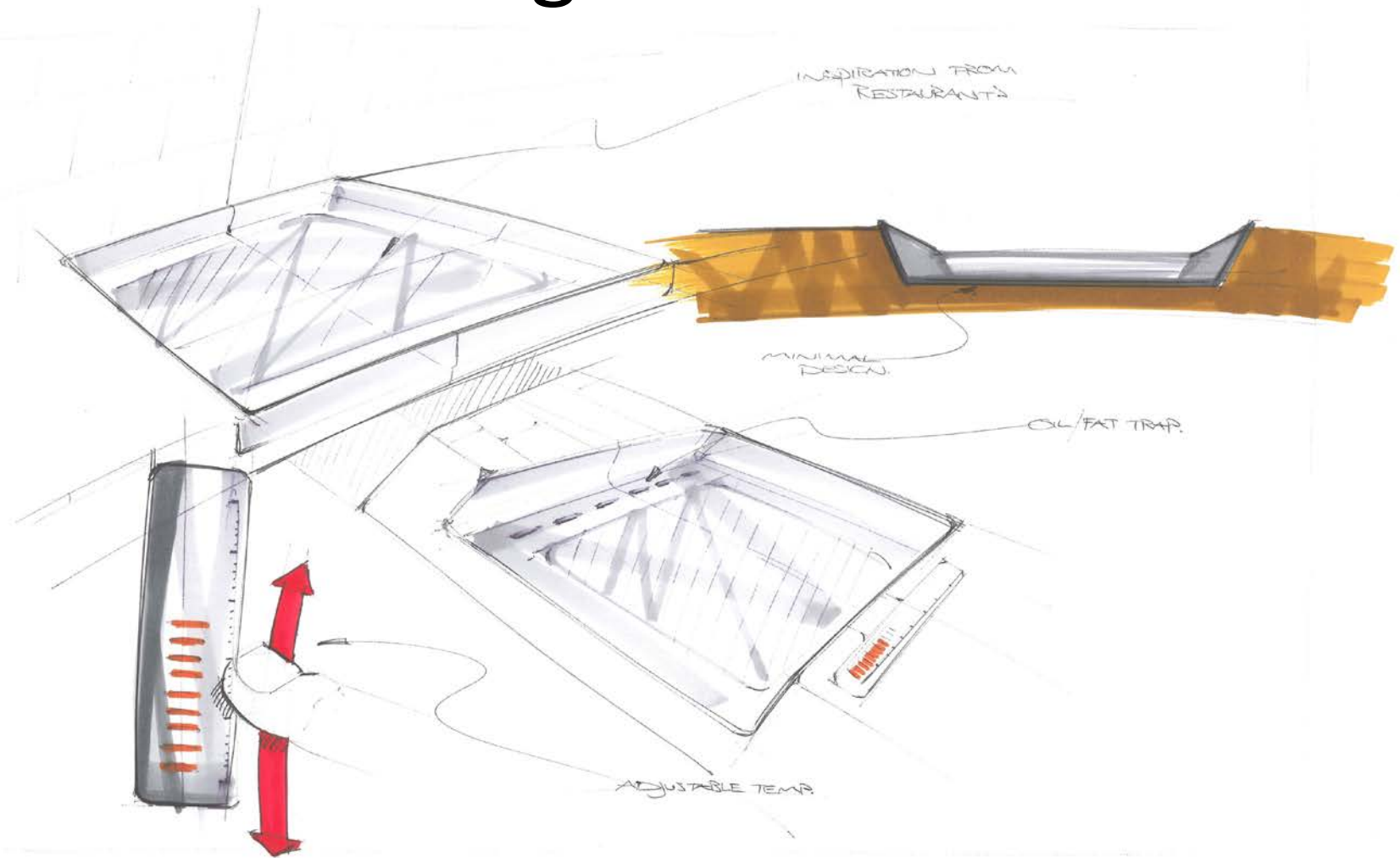
Specification

- Uncamouflage the pot/pan handle from its surroundings
- Allows the user to confidently place pan on hob without fear of placing on the edge and it falling over
- Letting the user know where their spatula is located without running the risk of burning themselves, able to see/feel where it is
- Use colour/ symbols to communicate with user

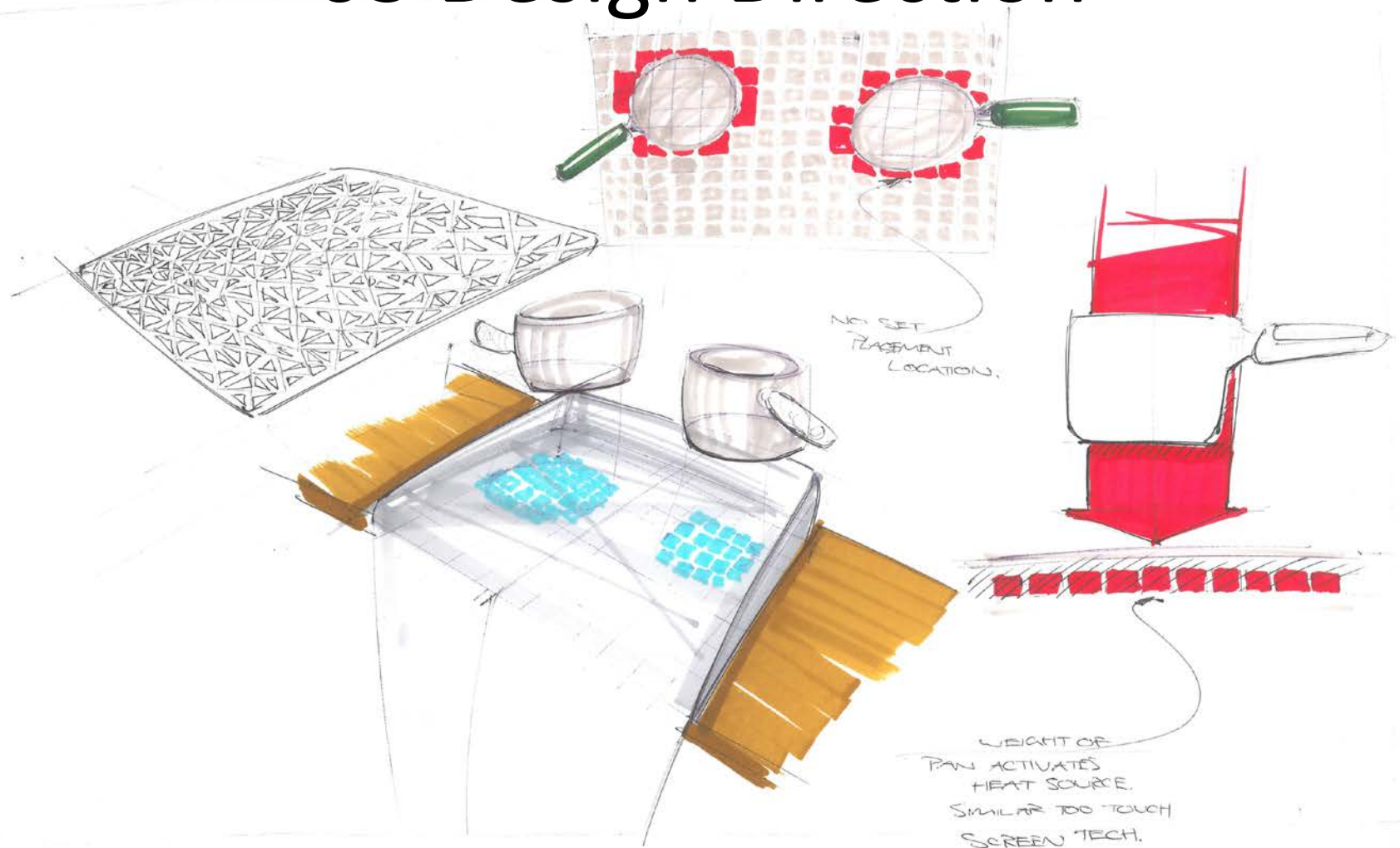
01 Design Direction



02 Design Direction



03 Design Direction



Reference

RNIB. (2014). *Key information and statistics*. Retrieved October 28, 2014, from <http://www.rnib.org.uk/knowledge-and-research-hub/key-information-and-statistics>