



SDP₁

Show and Tell

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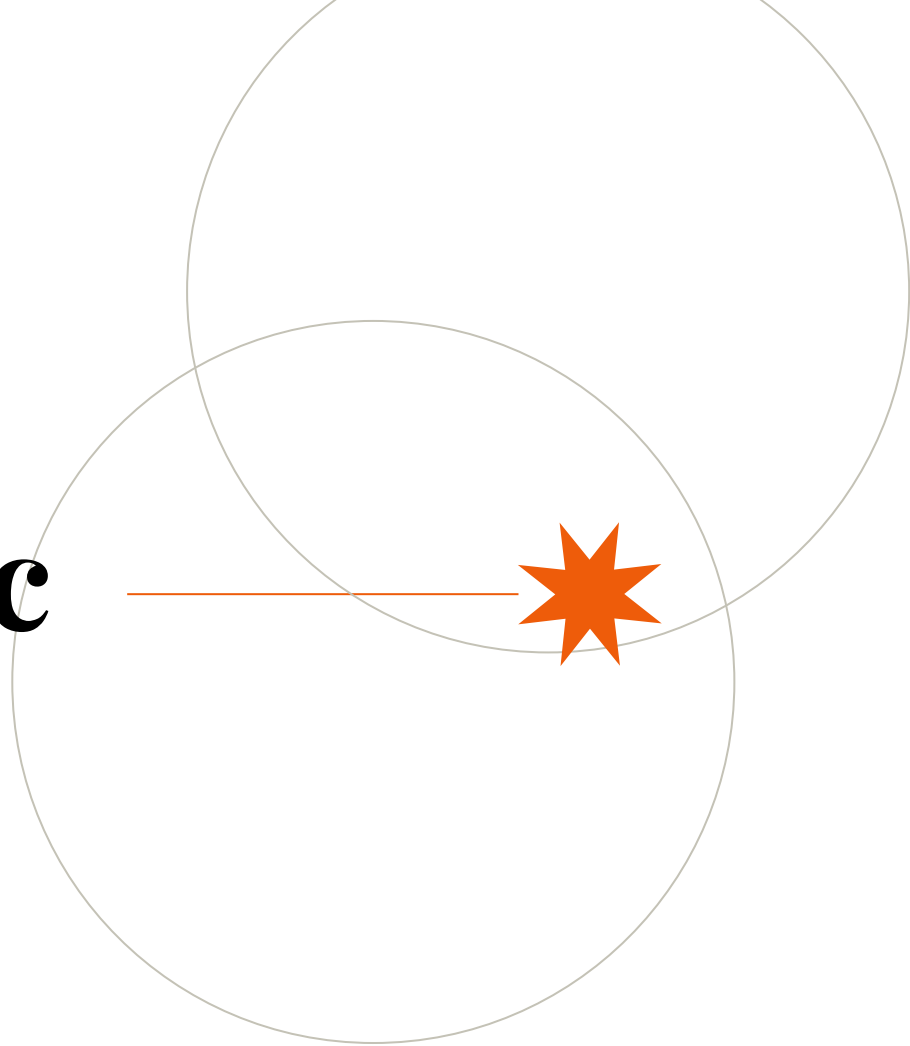
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Project Topic



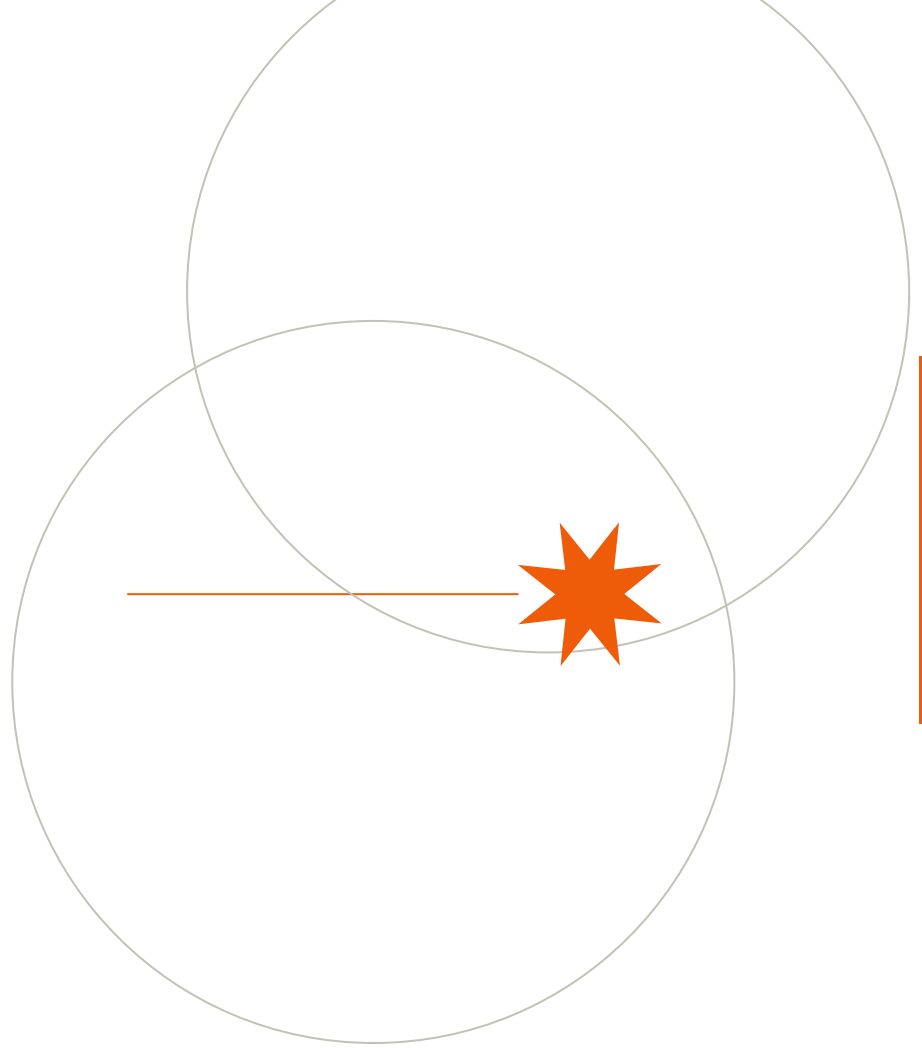
Project Topic

- To utilize **accessible** and **multisensorial** technology to engage the Brantford community with local businesses
- Specifically, to use QR codes to bring awareness and increase foot traffic to local businesses while engaging people's visual, auditory, and haptic senses



2

Aims & Objectives



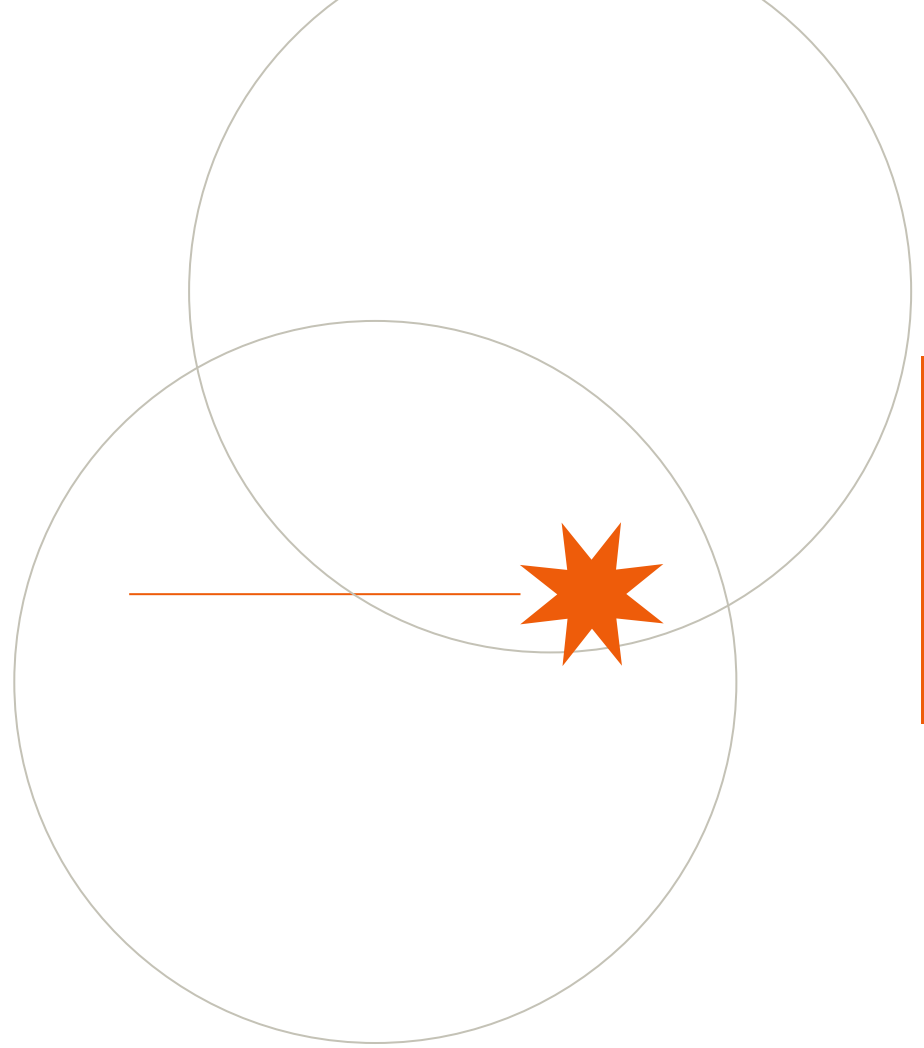
Aims & Objectives

- To increase engagement with local businesses in Brantford
- To bring awareness to the offerings of various Brantford businesses
- To create a system that achieves the above objectives whilst being entertaining, rewarding, and accessible for the community



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Prototype Production



The Design

- 3D printed QR codes on the outside of businesses to be scanned
 - More info on the business
 - Leads to a page on the business's website
 - QR code stickers hidden around the city to be found and redeemed at businesses
 - Colour coded with icons indicating the type of business (i.e. food, retail)
 - When scanned and sent to website, an audio clip will play that is indicative of the type of business the coupon is for (auditory engagement)
 - This design brings more people to local businesses and creates a memorable experience for the community
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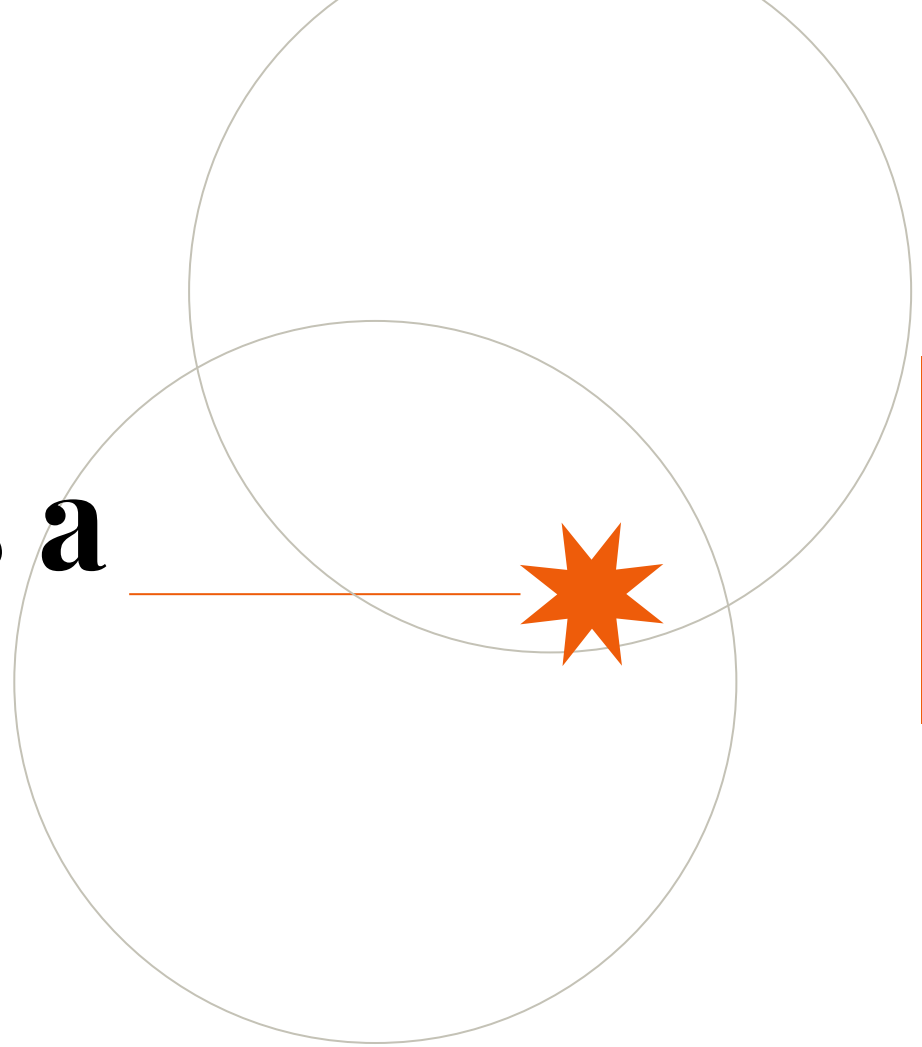
Prototype Production

After discussions of what the prototype would look like, we split the roles of creating to:

1. a 3D mockup of the physical QR code using Tinkercad
 - Discussed how to make visible at night and decided on using little overhead lights to make it scannable
 2. a coupon QR code sticker mockup using Adobe Illustrator
 3. a virtual mockup of what the destination web page would look like after scanning a QR code
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4

Prototype as a Haptic Tool



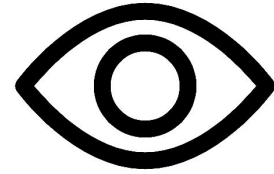
Sight + Sound

Visual:

- QR code
- Coloured indicator corresponds to type of code
- High contrast
- Light

Auditory:

- Sound when scanned



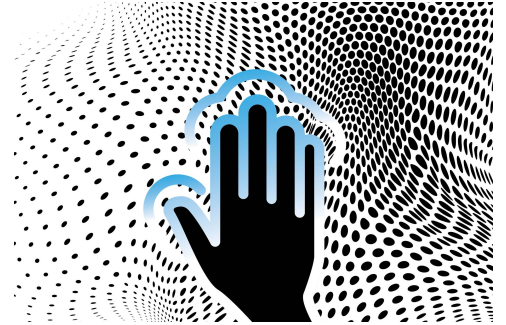
Touch + Motion

Haptic:

- 3D QR codes
- 3D bubble stickers
- Vibration when scanned (along with sound)

Kinaesthetic:

- Motion to bring phone up to scan QR code



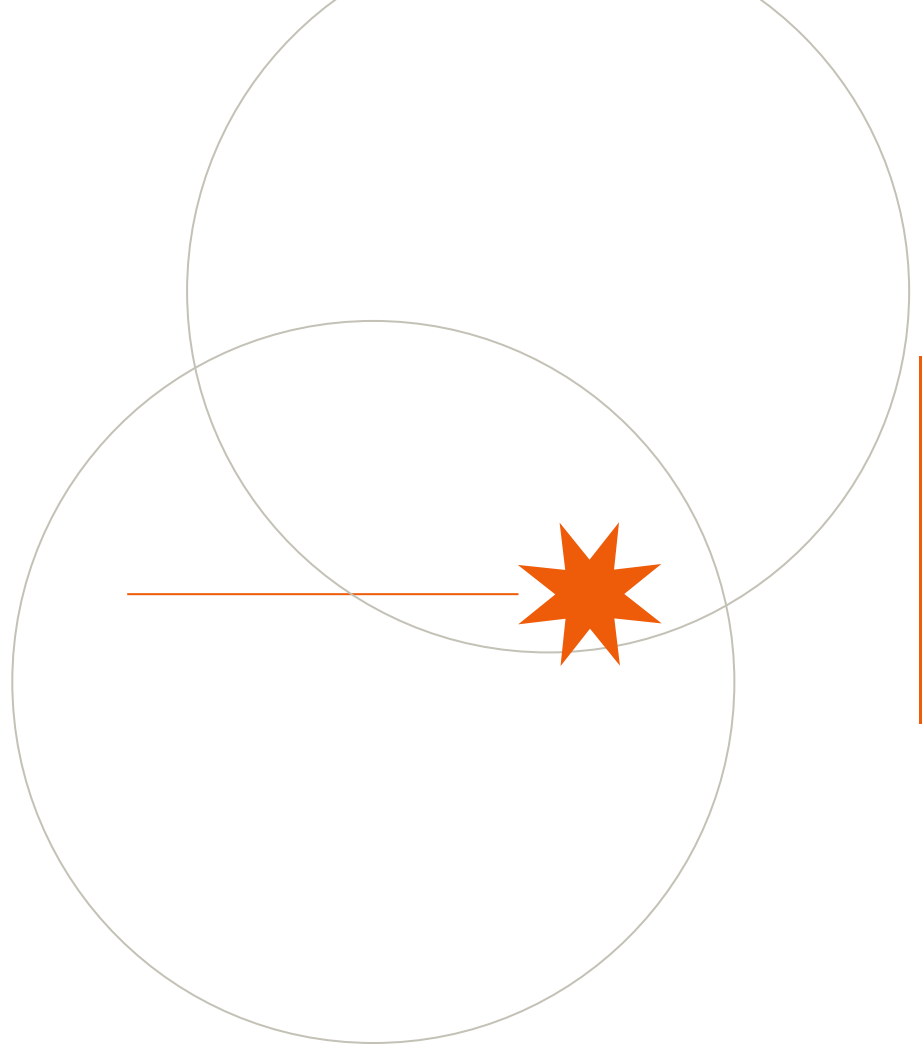
Accessibility

- High-contrast colours
- Light
- Sound & vibration indicators
- 3D shapes

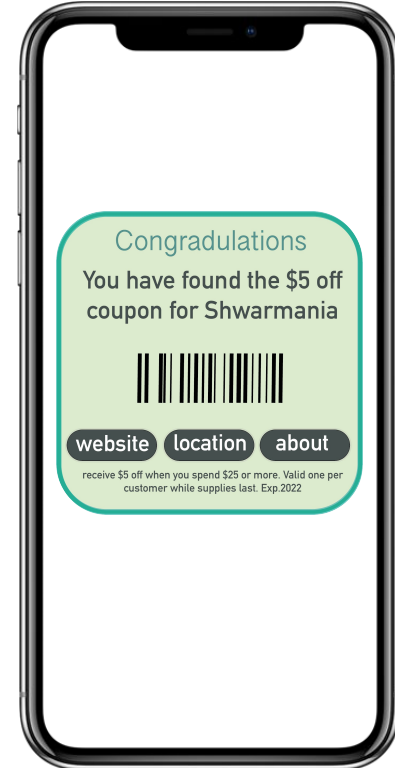
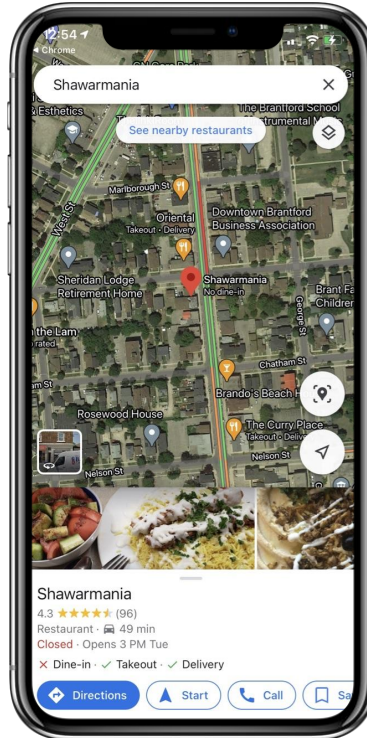
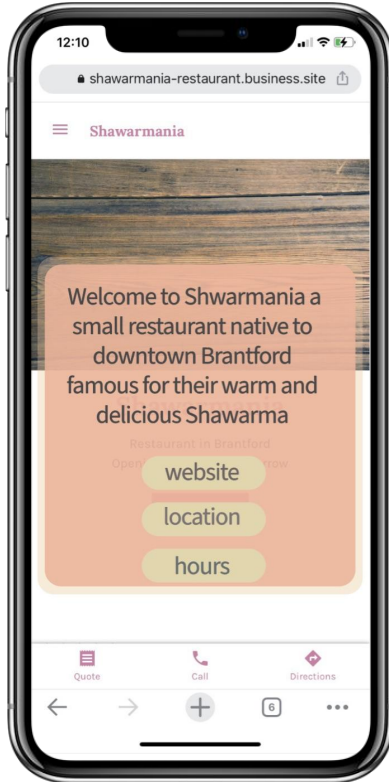


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Prototype Photos



Digital Prototype

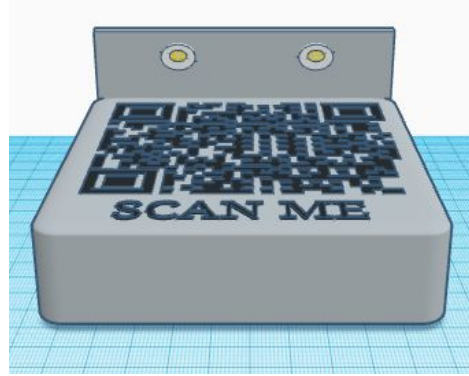


3D Prototype - Tinkercad

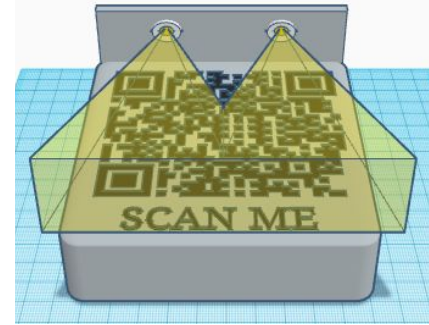
Top view



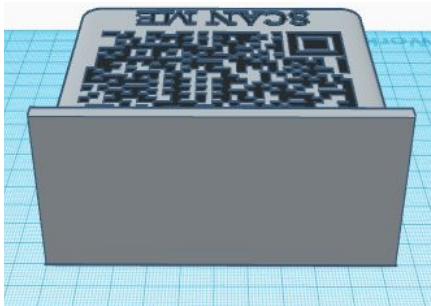
Front view



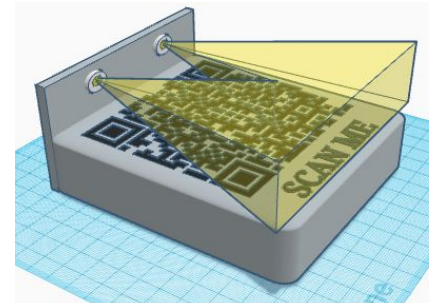
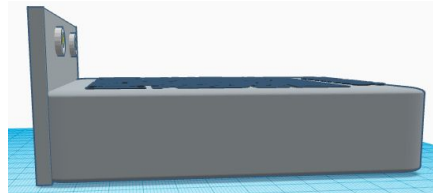
View with lights



Back view



Side view



Digital Prototype – Sicker Coupons



Unique colour + icon for **retail** coupon



Unique colour + icon for **food** coupon

Thank you!
Any Questions?

References

Icons made by [Kiranshastry](#) from [Flaticon](#) www.flaticon.com