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UI/UX PORTFOLIO 2016

UI CUSTOMIZATION
A MOBILE BASED CASE STUDY

Sketch | iOS

Abstract

UI customization allows users to take control and make changes to the presentation of the interface to fit their own desires. Unfortunately, there are less customization features and researches on mobile apps compared to

Through this case study, we identify the widespread needs for appearance-based customization on mobile applications from 32 participants with responses detailing over 200 needs by conducting a diary study. Furthermore, based on interviewing 16 power users, we create the design space which includes three key dimensions of customization interfaces on mobile apps: *manipulating interface directly*, *informing customization interaction* and *tweaking and undoing during customization*.

We present a set of interactions to customize mobile apps, which are designed by professionals based on our

exploration, that test the generative power of the design space.

Interaction Design

Interactions on a navigation bar ordered in accordance to stage of customization: (a) Message that indicates customization is available blinks over a period of time (b) Long press triggers the entrance into customization mode (c) Icons that can be interacted with wiggle in addition to customization guidelines like dragging to hide or pin. Non-targeted UI will covered by translucent background (d) Targetable icon can be freely dragged to change its location (e) Undo button that reverts the last action appears when a change has been made (f) Tapping the translucent background will exit customization mode and save the changes made

REALSENSE

PROTOTYPING INTERACTIVE LEARNING

Sketch | Photoshop | RealSense

Abstract

Streaming services have forever changed the way users interact with digital media. To an extent, Twitch and YouTube have democratized access to multimedia/streaming platforms for everyone in the world. This democratization gives birth to a variety of shows each with their own special characteristics & purpose. Live shows are extremely varied in the content that is broadcasted, ranging from gaming to educational shows. Through the use of RealSense camera, facial tracking allows for a 3D perspective into the broadcasting content, which in turn allows for content to be manipulated for an immersive experience. Furthermore, the viewer is able to pick his/her own avatar to represent his/her virtual identity. With facial feature detection, users can provide emotion-based feedback that is representative of viewer experience.

In this project, we prototype the interactive system as a proof of concept for potential integration into present broadcasting platforms.

Figure 1

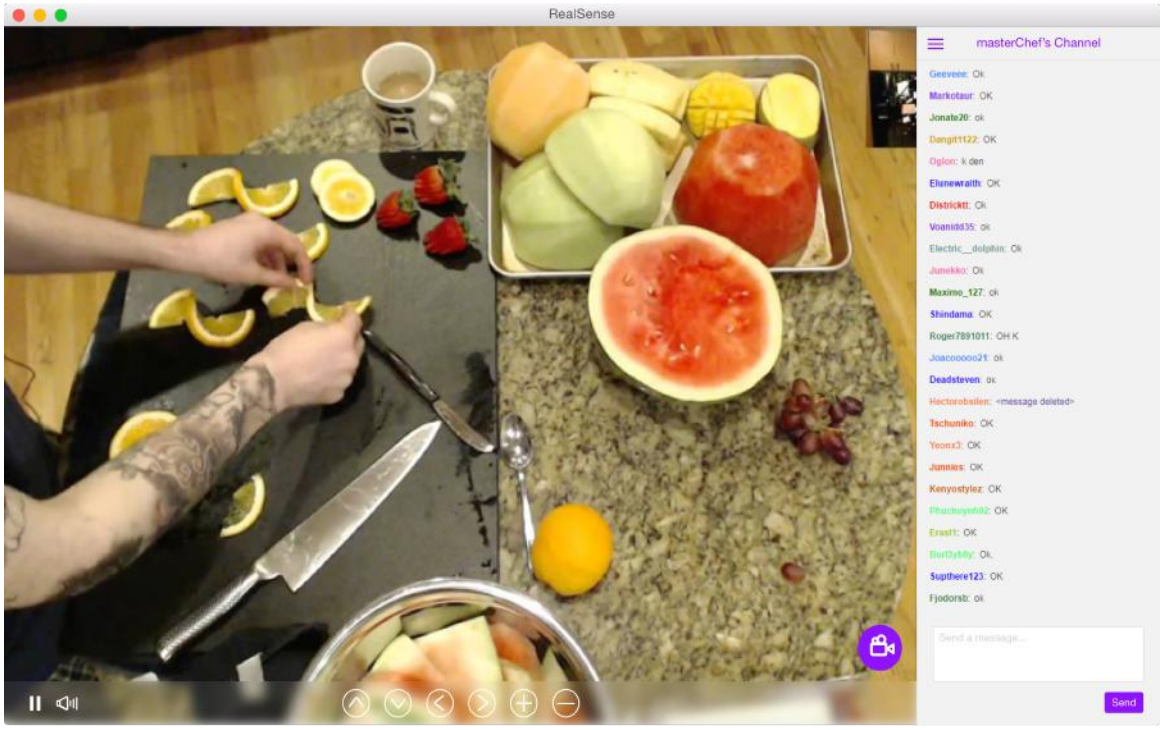


Figure 2

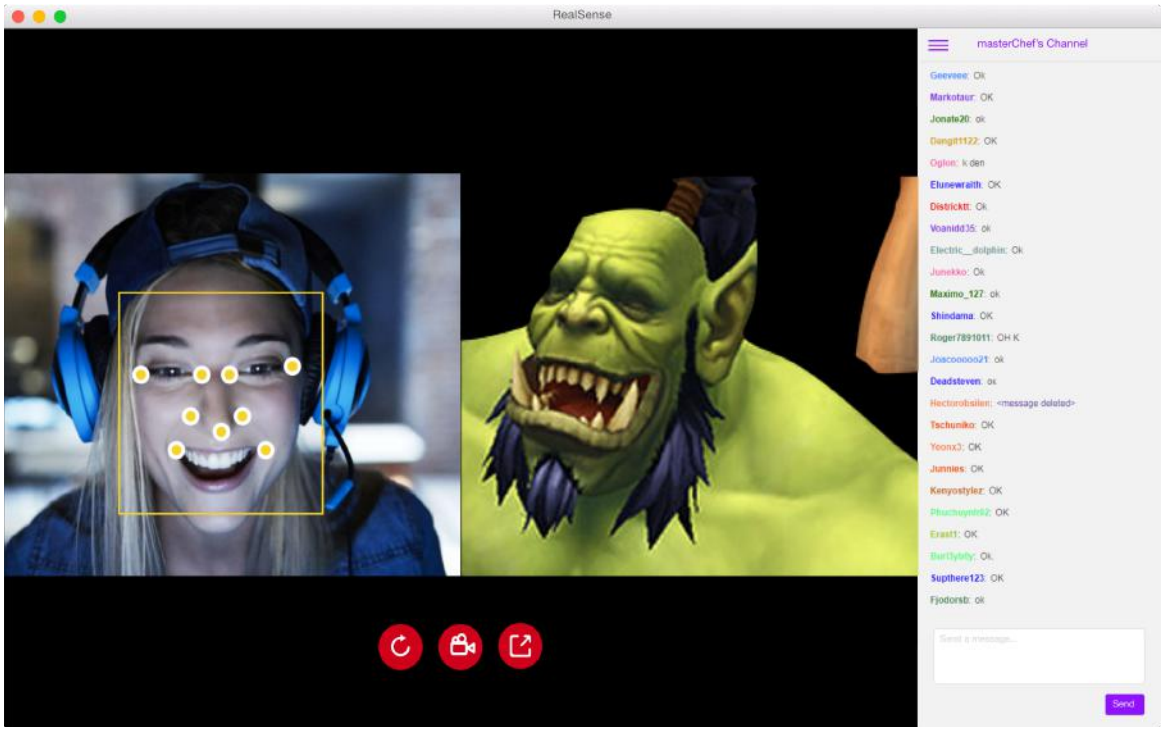


Figure 1: Users are able to navigate the live stream via a pop-up playback control bar. Supported functions include: play/pause, volume, tilt (up, down, left, right), zoom in/out. With the record icon, user can transition into the recording screen (figure 2) and send an animated feedback.

Figure 2: In the record screen, users' facial features are detected and mapped onto the chosen avatar. Functions include record, redo. Once the user is satisfied with the recording, they can send the reaction which is viewable to the audience.

Awards

Intel APEC Global Challenge 2015 - World Finalists

DUN-HUANG MAGAO CAVE

IMMERSIVE VIRTUAL TOURING ACROSS MULTIPLE PLATFORMS

Sketch | Unity3D | Project Tango | Interactive tablet

Abstract

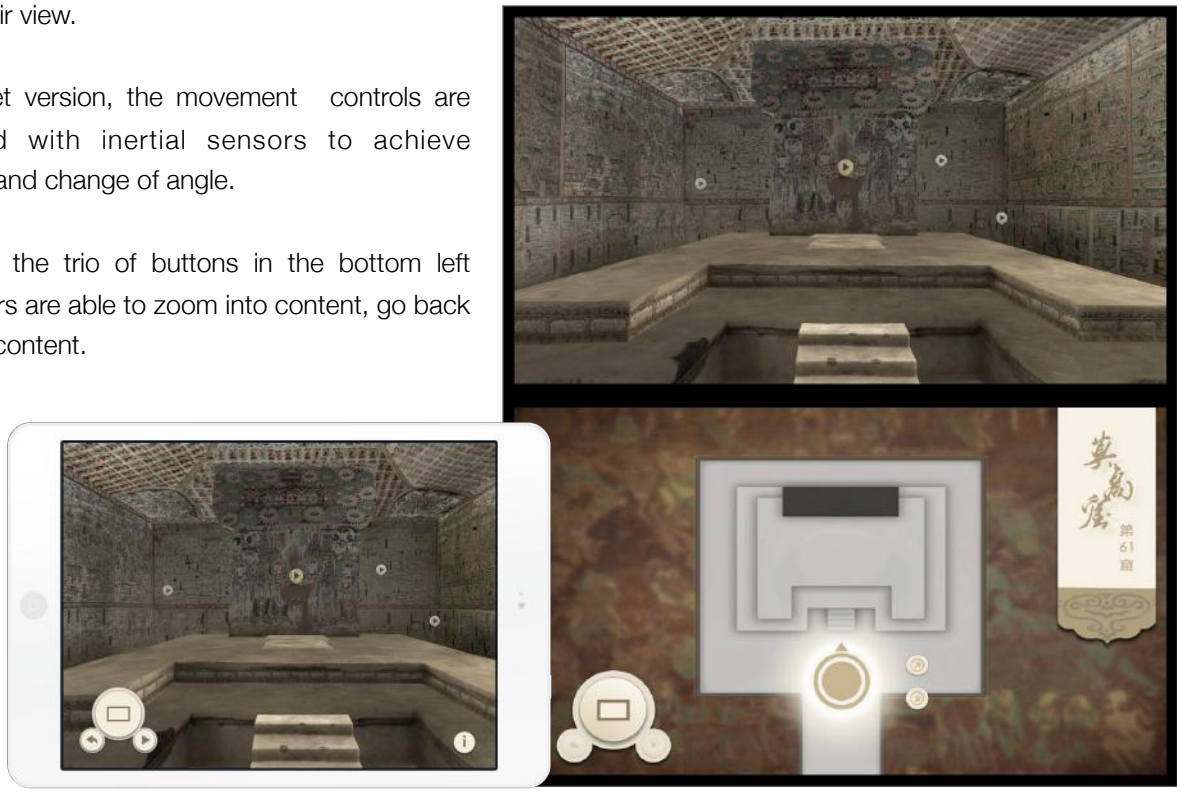
This project presents an immersive virtual touring system which contains plenty of media contents about two Dun-Huang caves: cave 61 and cave 254. The caves mentioned above are two of the most important caves which contain rich historical information and research data of Dun-Huang. We aim to build an intuitive cave browsing system on multiple platforms (tabletop, tablet, HMD) to allow users to tour the caves in details and learn the important historical contents.

Design

In the tabletop version, the 3D render of the Magao cave is projected on the top screen, while the UI and control buttons are projected on the bottom screen. Users are able to rotate the glowing icon to rotate their field of view, and also use up and down buttons to change the angle of their view.

In the tablet version, the movement controls are supplanted with inertial sensors to achieve movement and change of angle.

Lastly, with the trio of buttons in the bottom left corner. Users are able to zoom into content, go back or play the content.



WALLCOM

DESIGNING IOT INTERACTIONS IN BUS STOPS

Sketch | Photoshop

Abstract

With the concept of internet-of-things becoming more integrated into mainstream technology design, the advent of various IOT devices and interactions is now here. In this project, we conceptualize a potential interaction at bus stops. Users who are at bus stop terminals are able to draw on the blank canvas with various color and brush strokes and can use this as a method of interacting with other users at differing bus stops. Potential exchange of traffic, weather or other information can be easily visualized with simple drawings.