**INTERNSHIP**

> **Position:** 3-week paid internship position starting asap via ADAPT, TCD
>
> **Type:** Developer / Creative Technologist
>
> **Who would you be working with?**
> Researcher at ADAPT TCD: Dr. Jennifer Edmond
> Artist: Laura Allcorn
>
> **Application process:** Please email a short CV and cover letter to EDMONDJ@tcd.ie by Wednesday 7th July 2021.

**Description**

Our project, SKU-Market, was commissioned as part of the upcoming BIAS exhibition at Science Gallery Dublin to open in September. **We are looking for a creative technologist / developer who can collaborate with us to bring a shopping-style experience to life in the gallery at Science Gallery Dublin.**

**Experience Overview**
SKU-Market is a participatory experience where visitors 'buy' the things they like, then get to see how an algorithm interprets their choices to create a vivid picture of who they are. This experience makes tangible how our online behaviors can be interpreted, skewed, and applied to shape our lives in surprising ways. Who decided: SKU or YOU?

Visitors will scan products with a wireless hand-held scanner or ipad, adding items to their cart, and then use a checkout station. We are using a shopping interaction paradigm to surface narrative content on the receipt. The visitor's receipt will read like a mad libs-style horoscope, as the system has taken adjectives and phrases associated with each item they scanned and populated a scripted profile.

Our initial research suggests we might be able to use an open-source e-commerce app and off the shelf hardware (barcode scanner and receipt printer from adafruit). We're looking for someone who can help us identify the best approach and technologies to create a reliable experience for Science Gallery visitors.

**Timeline**
We'd like to find a collaborator by mid July. Development and testing needs to be completed by September for installation around the first week of September.

**User Flow**
Front End, Customer Facing Shop Side of SKU Market
1. Visitor picks up scanner or uses webapp on their phone

2. Visitor scans a set number of items (based on a budget or one per shelf, etc.)
3. Visitor checks out
4. Visitor receives a receipt (printed or digital)

Back End, Shadowy Inner Workings of Profile Development at SKU Market
1. Onlookers see profile building SKU by SKU

**Possible Technology Approaches**
**Option 1:** Wireless Hand-Held Scanner/Tethered iPad + Adapted Open-Source E-Commerce Code + Receipt Printer
Visitors use a device to scan items and move to self checkout to receive a printed receipt.
We've identified barcode scanners and receipt printers on Adafruit.

**Option 2:** Web-app on phone or tethered ipad + Receipt Printer
Visitors use their own phones and a web app to scan products and then dock it at self checkout to receive a printed receipt or just get one digitally.

**Components**
- Hand-Held Scanner OR web-app on devices and barcodes/qr codes
- Data Model, information associated with each SKU
- Receipt print out based on mad lib style framework
- Back End Display showing how the system is computing the profile in real time

**Data processing steps (initial concept)**

1. Session launched, new session ID created
2. Via QR code or other scanning mechanism, FEuser (Front End User) will populate the session ID's 'basket' with a selection of n different products.
   a. Each product is associated with a price and at least 4 weighted attributes
   b. After each item is scanned, FEuser will be presented with a notification of the total number of items in their basket and the cumulative cost. If they surpass their total budget (or a time limit or one item per shelf) before adding the required number of objects to their basket, they will be presented with an error message and given the opportunity to remove or replace items in their basket.
3. Once the FEuser is satisfied with their basket, then can trigger a processing phase.
4. In the processing phase, a set of scores for the weighted attributes will be calculated. Attribute scores over a certain threshold will trigger certain messages to be sent to the FEusers on their receipt (which may also include some generic and/or random messages).
   a. This processing phase will be visualised as well in a separate workflow, visible to the BEuser (Back End user). Ideally this visualisation will be iterative, showing interim scores as the additions to the basket are made, eg via barcharts. Again,

additional generic and/or random information may be added to and removed from the display.

5. FEusers receive a printed or digital 'receipt' with an assessment of their profile details.