TD Check-in

James Haig

Riley Campbell

**About**

For the TDChallenge, we made an app called TD Check-in. Our app lets users ‘check-in’ at a business and receive coupons and discounts for that business. Coupons get better the more the user spends at this business. This is ranked by ‘Coupon Tiers’. This allows TD to track where their users shop and how much they spend at a particular location and provide the customer with deals and discounts.

Coupons and discounts are completely up to TD to decide what businesses get what coupons at what coupon tier.

**How It Works**

When a user is at one of their favourite businesses they use the app to ‘check-in’. This gets the users current latitude and longitude and send a call to google to get places within a range of that location. If only one place is found then it asks the user if that’s the place they are currently trying to ‘check-in’ to. If there is more than one business found it prompts the user with the list of businesses found so the user can confirm where they are trying to ‘check-in’ to. If none are found it states that and gives the option to search again.

Once a user has ‘checked-in’ to a businessit loads an activity that shows available deals/coupons/discounts.The user must declare if they have made a transaction at this business by clicking “I made a transaction here”, and entering the amount they spent. Once the user has entered that value and it matches a TD debit card transaction on the same day within the hour then it will be logged in the database. The next time they ‘check-in’ to that same place they will get a notification of how much they spent on their last visit. Plus the more they spend at that business, the better the deals get. This gives the user more incentive to continue using the app.

The app contains four database tables: Check-in table, Transactions table, Place table, and the UserTransactions table. The Check-in table holds every check-in that the user has done in the lifespan of the app. It has a link to the Place table. The Place table hold all the information for every business the user has ‘checked-in’ to. The Transactions table is a table that represents the users debit cards transactions. The UserTransactions table is for linking the Place table and the Transaction table when the user declares their transaction, making it a successful ‘check-in’. With this system, the app is capable of keeping track of where exactly the user is spending their money.

**Why we deserve to win**

We deserve to win because we solved the problem of how to link TD financial services with complex location based services. Not only do we get the users latitude and longitude but we also send them to google and get back any places based on that latitude and longitude and store all that information in our database. We also include lots of incentive for users to use the app for long periods of time. We met all the requirements and made the app very user friendly and pleasing to look at. It also showcases TD colours and themes.

**How to unlock developer options**

Since this app is supposed to be used at a business and its transactions are supposed to be linked to a user’s debit card and only updated when it is used, we have added developer options to the app to make it easy to demo. Tapping the TD logo (on the check-in screen) **three times** will activate the developer options. These options activate a slider so a developer can customize the distance radius. The distance radius dictates how far away from the device’s current location we’ll look for businesses. The developer options also activate a button on the coupon page so a TD debit card transaction can be ‘stubbed out’ (simulates a transaction record being added to this TD account as if they’ve used their debit card).

It is **very** **important** that some transaction data is added when testing out this app. The transaction data is used to make sure that when they click “I made a transaction here”, that we can check their ‘real’ TD debit card transactions and make sure that they did in fact make a transaction at that business, at that time (within 1 hour).

**Real data vs Fake data**

The Real Data:

* Latitude and Longitude retrieved from the devices GPS or Wifi.
* Businessnames, addresses, etc come from Google Place Services

The Fake Data:

* Any number relating to coupons
* Any transaction made
* Barcode