Airhead

Developed by TURAMS

Provides Estimated Wait Times

- TSA lines
- Restaurants/Shops
- Bathroom

Detailed Walkthroughs for First Time Fliers

- Boarding Pass
- Bag Check
- TSA

Improved Navigation

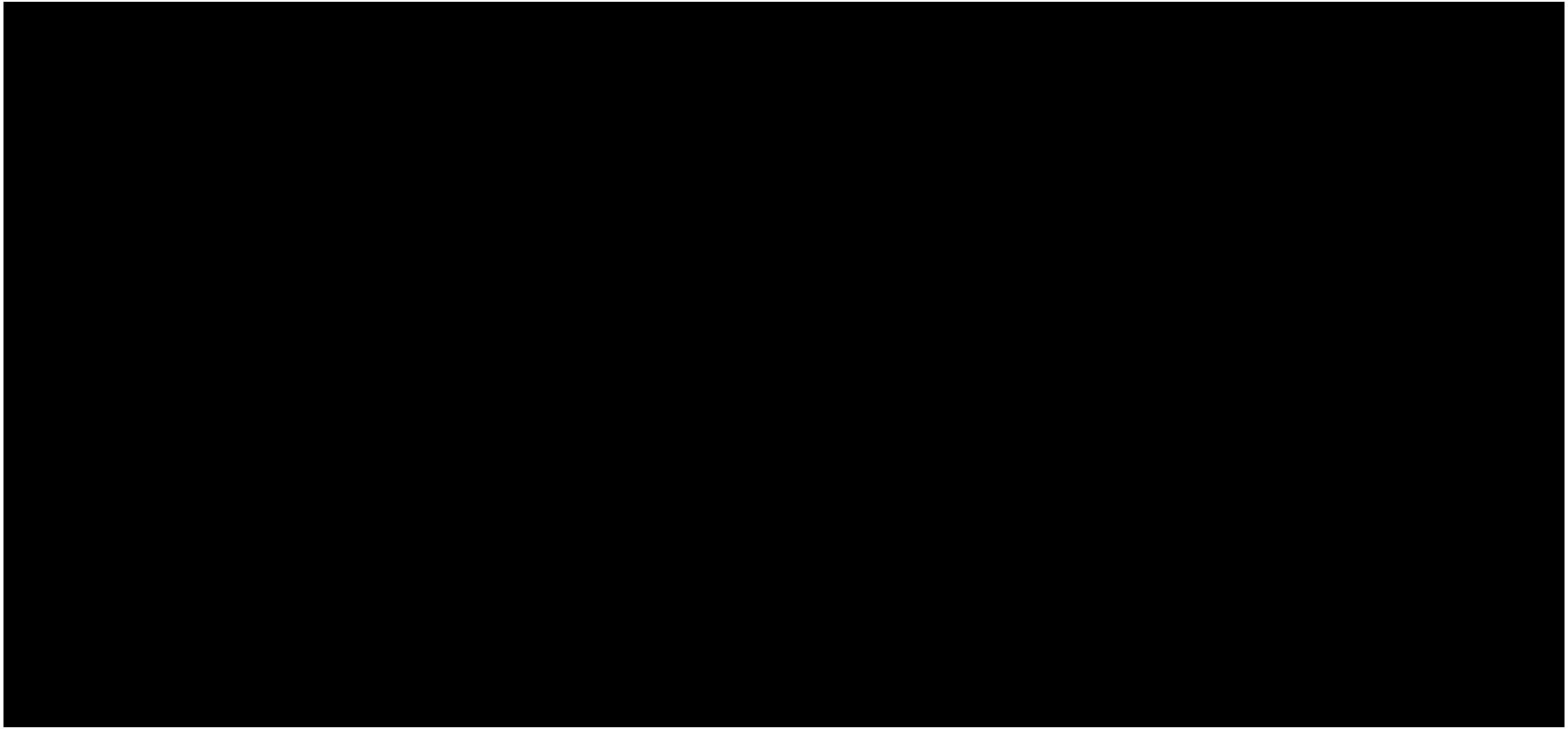
- Verbal Navigation
- Visual AR Navigation

Accessible

Efficient

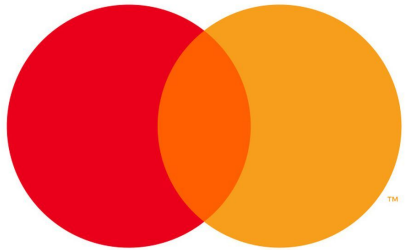
Convenient

Demo



Places API

Wait time data is modeled from the Places API by Mastercard. Places provides the location of merchants and relative distance from a certain location. We added an additional feature to calculate wait times from live transaction data at each location. Every transaction is stored in the database, and the frequency of these transactions (popularity) is used to model wait times at each location. We use both the location and popularity parameters to store wait time data in our system.



Communicate w/ a sensor to count people entering an establishment

```java
#communicate with sensor to scan MerchantIndustry
#calculate amount of patrons in building
#@GetMapping("/merchantIndustryCodes")
    public ResponseEntity<PagedMerchantIndustryCode> getMerchantSensor() {
        try {
            return ResponseEntity.ok(service.getMerchantSensor(101, 0));
        } catch(ApiException exception) {
            return new ResponseEntity(exception.getMessage(), HttpStatus.valueOf(exception.getCode()));
        }
    }
```

```java
public ResponseEntity<PagedPlaceInfo> getPlacesSearch(@RequestParam(value = "pageOffset", defaultValue = "0", required = false) int pageOff
                                                      @RequestParam(value = "pageLength", defaultValue = "20", required = false) int pa
                                                      @RequestParam("latitude") double latitude,
                                                      #@RequestParam("popularity") int numberOfPpl
                                                      @RequestParam("longitude") double longitude,
                                                      @RequestParam("distanceUnit") String distanceUnit,
                                                      @RequestParam("country") String country) {
```

Connecting the API to Airhead for restaurant wait time

```
placesInAirzport = {
    "TSA": [{"name": "Gate A", "lane": 1, "estTime": 25},{"name": "Gate B", "lane": 2, "time": 34}],
    #call Mastercard API to get traffic and frequency to estimate a wait time
    "Restaurant":[{"type": "coffee", "name": "Starbucks", "location": "A4", "time": "45"},
                  {"type": "coffee", "name": "Dunkin Donuts", "location": "A7", "time": 3}],
    "Bathroom":[{"name":"Bathroom 1", "estTime": 10, "location": "A"},{"name": "Bathroom 2", "estTime": 15,
                                                                       "location": "B"}]

}
```