AirFit Mobile Application

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Introductions

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Wearable Tech Providers

- fitbit
- Kokoon
- Garmin
- Apple
- moov
- TomTom
- Levi's Jacquard
- Samsung
- Xiaomi
Wearable Tech Growth

Wearable device market value from 2010 to 2018 (in million U.S. dollars)

Source: Business Insider © Statista 2014

Additional Information Worldwide
AirFit Architecture
AirNow Data

AirNow API is publically available and receives real-time air quality observations from more than 2,000 monitoring stations and collects forecasts for more than 300 cities.

- Search for conditions by zip code or geographic coordinates
- Air quality forecasts and action days issued by air quality agencies.
- Real-time air quality observations by reporting areas
- Historical air quality observations by reporting areas
- Specify a distance range, and the web service will return information for the nearest reporting area
Wearable Tech Data

- Daily Activity Summary
- Frequent activities
- Log activity
- Recent activities
- Favorite activities
- Body fat logs
- Activity goals
Integrating AirNow and Wearable Tech

- View the number of steps taken compared to the air quality on a specific day
- Receive information about air quality in my area
- Track personal activity level per day over a period of time
- Track when you exercise indoors versus outdoors
- Choose your location to view air quality and the amount of activity you have in that location
AirFit Workflow – Install App

1. **Do you want to install this application? It will get access to:**
   - **PRIVACY**
     - Precise location (GPS and network-based)
     - Read your contacts
     - Read your own contact card
     - Find accounts on the device
   - **DEVICE ACCESS**
     - Full network access
     - View network connections

2. **Installing...**

3. **App installed.**
Sign in with Fitbit
Select Your Location

[Images of interface screens showing the process of selecting a location]
AQI and Activity Level

Today’s AQI is GOOD

- Nov 24 Running: 2.73 mi Outside
- Nov 21 Running: 2.73 mi Inside
- Nov 19 Running: 2.73 mi Outside
- Nov 14 Running: 2.73 mi Inside

Air Quality Index (AQI) Values

<table>
<thead>
<tr>
<th>AQI</th>
<th>Levels of Health Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 50</td>
<td>Good</td>
</tr>
<tr>
<td>51-100</td>
<td>Moderate</td>
</tr>
<tr>
<td>101-150</td>
<td>Unhealthy for Sensitive Groups</td>
</tr>
<tr>
<td>151-200</td>
<td>Unhealthy</td>
</tr>
<tr>
<td>201-300</td>
<td>Very Unhealthy</td>
</tr>
<tr>
<td>301 to 500</td>
<td>Hazardous</td>
</tr>
</tbody>
</table>
AirFit Metrics

Activity Over Time

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As the public, you can...

- Understand AQI ratings and what it means to them and their activity choices
- Receive information on recommended exercise environments or suggested periods of time for when to partake in physical activity
- Make more informed choices for your health
As the EPA, you can...

- Access accumulated data from the public who are using wearable fitness tracker technology to review activity choices
- Determine if there is any connection between air quality and physical activity
- Identify areas where infrequent exercise coincides with poor air quality
- Recommend particular exercise environments based on a larger set of air quality data
Future Capabilities

- Collect demographic data about the individual to personalize the recommendations and alerts
- Show alerts when there is good air quality so the user knows when to exercise
- Make recommendations for daily activities based on air quality and personal settings (e.g. allergies)
- Provide additional data regarding the specific pollutants and how they impact your recommended activity level
- Integrate with other types of wearable technology devices
Thank You