# Dispatcher

-- a service to connect businesses with people

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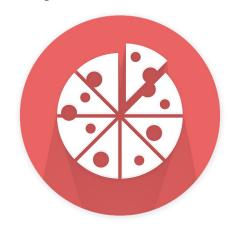
#### Overview

- Inspired by the "Uber" model
  - A pool of workers ("Drivers")
  - Drivers may be associated with zero to many businesses
  - Businesses create "Jobs"
  - One Driver may claim and complete any given job
- Not industry specific any delivery/courier/offsite service industry



#### Example Use Case -- Bob's Pizza Shop

No delivery drivers;
now wish to offer delivery



 Solution: subscribe to *Dispatcher*; approve a number of drivers through the service

# Example Use Case -- Bob's Pizza Shop

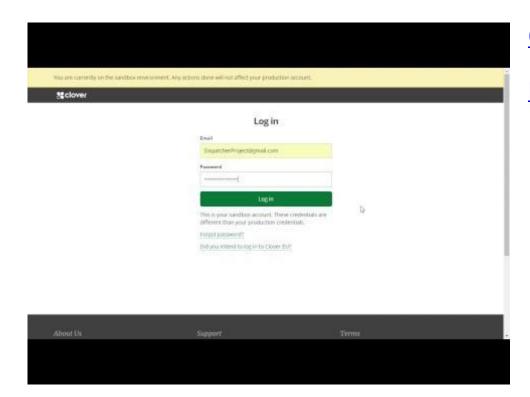
#### On reception of delivery order:

- Create job in Dispatcher app
- Notification is sent to Bob's network of drivers
- One driver claims the job, picks up the order, and performs

the delivery



#### Video Demo



**Online Link** 

**Local Link** 

#### Supporting Technologies -- Backend

- AWS EC2 instance Ubuntu 16.04.3 LTS
- MySQL 5.7
- Apache HTTPD 2.4 & mod\_wsgi module





#### Supporting Technologies -- Frontend

- Materialize CSS
- jQuery

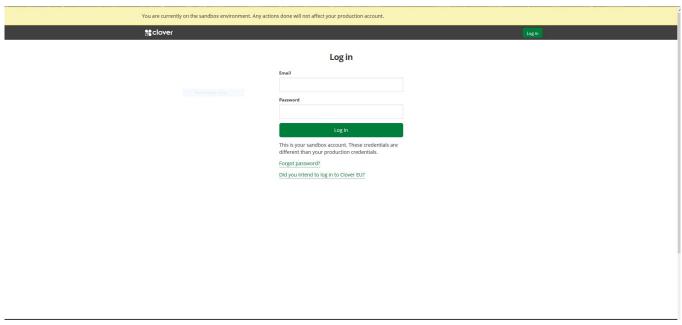


#### Supporting Technologies -- Clover

- For business authentication oauth
- Clover REST API for business information
- Future: all financial transactions



# Supporting Technologies - Clover OAuth



#### Supporting Technologies -- Twilio

- Sending out notification of new job
- Sending out confirmation code when deregistering



#### The Takeaway - Flask

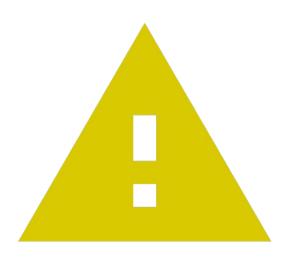
Flask was the keystone of this project

- The combination of:
  - Stupid-easy syntax (python: pseudocode that runs)
  - Excellent documentation
  - Popularity many existing packages to extend core Flask functionality
  - It "just works" -- no barriers to development



#### **Obstacles**

- New technologies
- Android app development dropped
- Oauth
- SMS service utilization



### Acknowledgements

- Dr. Baliga
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# Questions