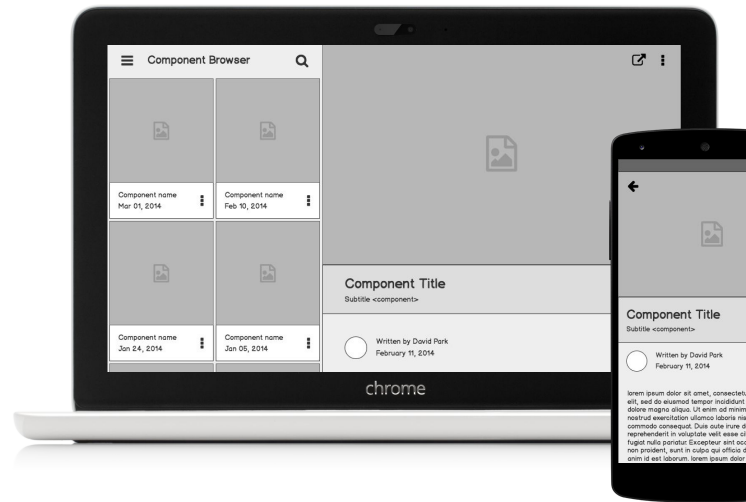


Hackathon Projects: Bringing It All Together

From Idea to Final Deliverables

Rich Asay & David Reynolds



Outline

- Sample Project
- What / Why: Idea, Problem, & Solution
- Who: Forming Your Team
- How: Determining Roles & Techniques
- When: Milestones & Timeline
- Closing Thoughts

The What ?



Quickly work with mentors to understand the problem that the project is trying to solve.



Example Project - sms2ccq



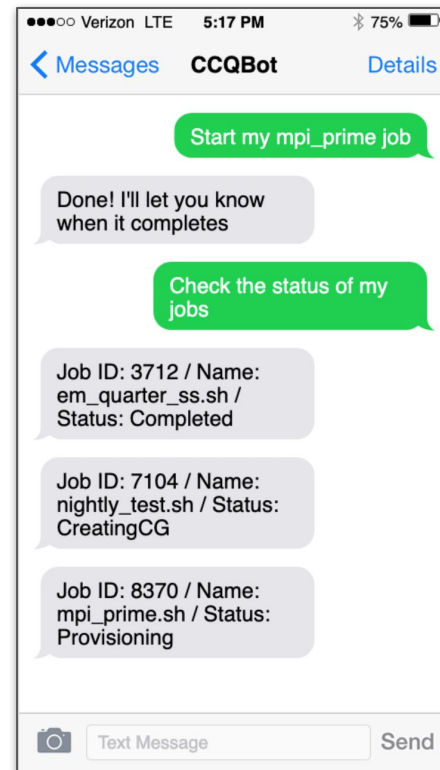
2019

Overview & Goal:

Use Twilio to build a chatbot that allows user to submit jobs and check status via text message.

Main Components:

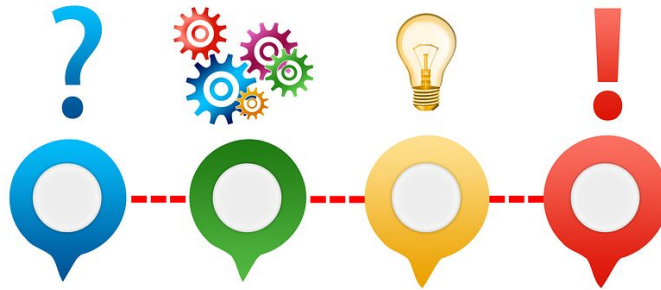
- **Cloudy Cluster**
- **Twilio**
- **Python Script - Integrate & Automate**



The Problem & Idea - (Don't forget Atlanta)

It's important that all of the members of the team understand what you're trying to do!

- Will your project be beneficial to users?
- Is it interesting but also challenging?
- Can it scale, improve and grow?
- Are your expectations realistic?



The Who ?

You might have a group of interested and enthusiastic people, but do you have the right mix of Players?

BALANCE is KEY

The 5 Stages of Team Development

- Forming
- Storming
- Norming
- Performing
- Adjourning



What

Who

How

When

Done

The How ?



Google Cloud

Tools

Code

Technology

APIs

Data Sources

etc.



```
31 def __init__(self):
32     self.file = None
33     self.fingerprints = set()
34     self.logdupes = True
35     self.debug = debug
36     self.logger = logging.getLogger(__name__)
37     if path:
38         self.file = open(os.path.join(path, 'requests.txt'),
39                             'a')
40         self.fingerprints.update(re.findall(r'(?P<ip>[0-9.]+)', self.file.read()))
41
42 @classmethod
43 def from_settings(cls, settings):
44     debug = settings.getbool('debug', False)
45     return cls(job_dir(settings), debug)
46
47 def request_seen(self, request):
48     fp = self.request_fingerprint(request)
49     if fp in self.fingerprints:
50         return True
51     self.fingerprints.add(fp)
52     if self.file:
53         self.file.write(fp + os.linesep)
54
55 def request_fingerprint(self, request):
56     return request_fingerprint(request)
```

What

Who

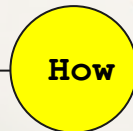
How

When

Done

The When ?

- **Managing your time is critical!!!**
- **Daily Check Ins**
- **Pop-Up Challenges**



Foundation & Stages of Development

Start with a solid foundation that you can build from:

- Research, learn, and Hello World
- Connect the dots as Proof of Concept
- Add features & complexity
- Build out the UI
- Test
- Present your solution



In Conclusion - Critical Elements of Success

- **Communication, Communication, Communication**
- **Realistic Expectations**
- **Daily Checkpoints**
- **Tracking Time, Deliverables, Milestones**

Thanks for Attending

Any Questions?

