

Title: Bootstrapping A Service with MongoDB Stitch and MERN Stack

Group Members:

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Statement of Problem:

Building a boilerplate service is time consuming and inefficient. Integrating a database, third party services, and data management logic is not a good use of developer time especially when prototyping. *How do we build a feature rich client side application without having to build our own backend?*

Say I am an early stage startup that just received a bit of seed money to build out a living, breathing prototype of an app similar to Foursquare (check in at a location, post, and share). I know that I have enough runway for 3 months for me and another engineer to get this thing built and deployed. With that in mind, I think about what services I can use to help me. I can use Google or Facebook oauth for authentication, MongoDB for persistence, twilio for text messaging just to name a few. It would be nice if there was a way to have a packaged back end that managed these integrations and routing without having to build and maintain a Node and Express app.

We want to explore using a BaaS (backend as a service), in particular MongoDB Stitch, to bootstrap a Foursquare like application. Our motivation for doing this project is that it gives us the opportunity to build an application using MongoDB which we spent a few weeks studying. Secondly, we can dig deeper into REST APIs and how to interact with them. Thirdly it will let us explore a modern JavaScript framework. Finally we want to know whether the tradeoff of configuration is worth giving up customization. Is using Stitch a viable solution and something we would use in the future?

Design and Development Methodology:

We will build a basic app that lets users check in at locations and share those locations with other users. We will use guidance from MongoDB Stitch documentation and code snippets from an example repo to get direction on the front end. Once we build a minimal viable product, we would like to extend new features (such as twilio integration), this however will depend on time. Finally we would like to assess the benefits and drawbacks of using Stitch. We both have experience building backends and thus have a good comparison factor.

List of Tools:

- MongoDB Stitch (BaaS)
- MongoDB (easily integrated within Stitch)
- Facebook/Google Oauth (for authentication)
- NodeJS

- ReactJS/JSX
- ES6
- Twilio
- Google Maps API
- Git
- MongoDB stitch docs
- npm

We have access to all the tools and have already started work on development.