WD5 Product Proposal (Update 1)

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Actual Project: Resonate

Resource coordination tool for communicating with and booking talent on demand and ahead of time for events.

Resonate allows for mass communication with Contractors, you have a previous working relationship, to coordinate the staffing needs for upcoming and active events. An event coordinator will be able to reach out to all contractors that can fill the variable roles needed for an event, automating the tentative, confirmation, and booking process of the contractors.

The overall goal of this product is to reduce the man-hours associated with contacting and coordinating with event contractors with an initial focus on events of a musical nature.

User Stories & Functional Requirements

Base Requirements
- The system must have a web server (Express, Nginx, Apache, Custom, ect.)
- The system must handle the basic routing of incoming requests.
- The system must use a visual framework with custom branding/configuration.
- The system must use the visual framework to dynamically render component content.
- The system must handle all callbacks and request errors, should not throw fatal errors during normal operation.
- The system must be sufficiently documented to allow any other developer or instructor to installed your application locally without having any additional information.
- The system must store sensitive information in environmental variables.
- The system must be able to CRUD data from the database, through a Model, View, Controller or equivalent pattern.
- The system must hash any sensitive information that needs to be stored. (user passwords, user access tokens, etc.)
- The system must handle authentication sessions for users logging in and out.
- The system must be able to restrict a route based upon authentication status.
- The user can initiate a password reset on their own account.

User Hierarchy

As an Organization Owner, I need to delegate some of my powers to my employees to allow them to act in concert with each other within the resonate system.

- The System must have a User Hierarchy structure (Super Admin - Org - Owner - Manager- Contractor)

- The System must trach actions by each user within an org in an activity log.

Notifications

As a User, I want to be able to control how I am notified for each event so that I can select the best way to get a hold of me.

- The System must allow each user type to subscribe, similar to Github, to notifications for each accessible event.

- The System must allow users to specify, similar to Discord, notification preferences on a per event.

Contractor Actions

As a Contractor, I need to be able to manage my involvement with the events I am sub'd to allow for a clear line of communication with the event management team

- The System must allow contractors to update their confirmation status to each event.

- The System must show a full communication history between a contractor and org, with each comm tagged with event info, or non-event comms.

Event Management - CRUD

As an org manager I need to be able to CRUD evens so that all involved parties are apprised of changes in an organized and automated manner.

- The System should allow for the CRUD'ing of event base data.

Event Management - Booking & Live Actions

As an Event Coordinator, I need to be able to manage Contractors and live Event Actions so that last min moment to moment communication is covered.

- The Systems must allow for the Event coordinator to confirm the start of the gig, which will start the active contractors pay clocks.

- The Systems must allow for the Event coordinator to end the gig for a specific role, group, or all of the contractors

- The Systems must allow for the Manual booking of specific contractors to fill established roles of an event. Booking will have variable states.

- The Systems must allow for the Manual booking of specific contractors to add roles of an existing event

- The Systems must allow for the Automatic booking of contractors within the org for an open role.

- The Systems must allow for the Event coordinator to emergency Auto Book for a replacement or

additional role not previously accounted for.

Event Communication
As an Event Coordinator, I need to be able to directly communicate with contractors at an event to allow for mass communication.
- The System must allow for the Coordinators to message all contractors of a certain or multiple confirmation states.
- The System must allow for the Coordinators and above to review the communication history with a specific contractor
- The System must allow for the Automatic messaging of contractors upon a status change to the event based upon the selected notification preference of the status defined.

Add Contractor to Org
As an Org Manager, I want to be able to add a new contractor to the system for use at future events, or add them to a currently active event.
- The System must allow for the CRUD of a contractor.
- The System must allow for contractors to fulfill multiple roles.
- The System must allow the event coordinator to set a skill lvl per role for the contractor.

Feature Groups

- User Hierarchy
  - Super Admin
    - Org
      - Owner
      - Org Manager
        - Event Coordinator
          - Contractor
- Notifications
  - Communications Can be Txt or Email
    - Has Opt-in Confirmation
- Contractor Actions (Talent / Labor)
  - Confirmation State
    - Tentative
    - Confirmed
    - Need to get back to you
    - Active (there now)
  - Full communication history with Manager viewable organized by Event

- Event Management
  - CRUD Events
    - Link to map/address
    - Base Details
      - Description
      - Start Time
      - Expected Duration
      - Roles needed x qty
        - Start Time Offset
        - Expected Duration
        - Allow for Grouping of roles (front of the house, back of the house, talent)
    - Rental/Equipment Needs?
    - Special Access Badge considerations?
  - Booking
    - Manual
    - Auto
      - Timeout rolling invites to the booking event
  - Communication
    - Can message [event(s)] contractors of a certain [confirmation state]
      - Request Confirmation from Contractors
    - Communication history with each contractor
    - Auto Updates to Attached Contractors based upon event status updates
      - Canceled
      - Time/Day Change
      - Status Changes
  - Add Contractor
    - Send Confirmation
      - Home Timezone
      - Do Not Disturb hours
    - Set Hourly Pay Scale
    - Tag as Role (Base guitarist, Violinist, roadie, lighting tech, sound tech)
      - Prioritization/Skill by Role
  - Pay Management
    - Transactions Management of:
      - Contractor
      - Event
  - Event Statuses
    - Dynamic Status [Tentative, Confirmed]
      - Settable to trigger notifications.
  - Event Live Actions
    - Confirm the start of gig
    - Confirm end of gig for all

- ■ Manual end of gig for specific talent or group (roadies go home)
  - ■ Emergency Auto book
    - ■ War dial Rolodex for missing talent
- ● Calendar
  - ○ List of Events
  - ○ Exportable to .ical file
  - ○ Subscribable?

API

Custom API for data CRUD from the back end micro-service. Twilio will be employed to send SMS messages. Nodemailer, while not an API, will be employed server-side to send emails to users.

Proposal One: Social Escrow Service

Social Broker is an escrow and validation service for confidently, confidentially, and securely selling or buying an Instagram account.

For sellers, register via OAuth, to verify you control the account you intend to sell your Instagram account on our open market.

For buyers, we act as an escrow service to ensure a smooth transition of the account between the seller and buyers.

For this month the money transactions will be simulated but built so that a payment processor can be plugged in as a stretch goal.

Features

OAuth as User
This will acquire the authentication token for an active Instagram account.

Seller Indication
An authenticated account can identify they would like to sell their account and sends this to an auction block.

Auction Block
A listing of all Instagram accounts currently for sale within our application, with a countdown to when they are concluded. Sellers can specify a buy now price.

Post Auction Selling Processed
This will be a step through a process that walks the seller through several form steps to provide the information needed to transfer ownership of the account.

Auction / Escrow tracker
Admins will have to manually perform the accessing and resetting of passwords provided by the seller. A workflow tracker will be needed to manage the state of the account transaction.

Buyer / Seller Notification
An email will need to be sent to the Buyer upon securing of funding. Confirmation of completion of the transaction will be sent to buyer to release funds to seller. Upon buyer release the seller will be updated with the status and funds will be unlocked for them.

APIs

To achieve the goals of this application the Instagram API will need to be utilized.

Stretch Goal

The inclusion of the Stripe API to facilitate the actual transactions of the accounts.

Initial Research

- Valued Instagram Metrics and Analytics
  - https://agencyanalytics.com/blog/instagram-metrics-to-measure-success
  - https://blog.iconosquare.com/instagram-metrics/
- Instagram Graph API
  - https://developers.facebook.com/docs/instagram-api/insights
  - https://developers.facebook.com/docs/instagram-api/getting-started

Proposal Two: Bot or Not

Find out which Instagram followers an account has are actually bots or at least act like bots.

The client side of this application would be a minimal interface that has a few screens related to the inputting of an Instagram user name and then an output that identifies if the account has been assessed, by some server-side code, to be a bot.

Recursively examine the followers of the target account to determine how deep the layers of bots go.

Features

Is a Bot?
When examining an array of strings, determine the complexity of the strings against some natural language libraries. Additional conditional logic can be established to identify additional patterns bots typically exhibit.

Scrape Feed
Scrape all the content from an Instagram Account to run through the bot checking feature.

Recursive
Bot Check all followers of a specific Instagram Account.

Interface
Rather than running as a server-based application build a Chrome Extension Front End that comes back with Bot or Not results.

APIs

To achieve the goals of this application the Instagram API will need to be utilized.

Proposal Three: Pro-File'r

The goals of this application will be to create a database of humans that follow obviously botting Instagram accounts. By targeted humans that have higher than normal engagement with bots will create a list that would be usable in future projects that are in the genre of building a bot that receives higher engagement from humans.

The end goal of these accounts would be to automate the collection, modification, and posting of the content that would appeal to these categorized humans. Once engagement has been established, sell the account.

Features

Is Bot
Identify a bot and evaluate the content of the bot to determine a primary and any secondary categories of content.

Is Human
Create a curated list of human accounts that are following identified bots and the associated genres of content the humans are interested in.

ReContent
Scrape the content of an existing of an identified bot. Automate the modification of the content in some meaningful way.

Create and Populate
Create an Instagram account and post the modified content to the account.

Engage Tagged Humans
Create a tool that will sporadically engage with the tagged/targeted humans and follow them to foster engagement.

APIs

To achieve the goals of this application the Instagram API will need to be utilized.