Fausto Rosado Module 7 Problem Solving

Having prior experience in a web development bootcamp, and talking with many BC graduates, who struggle with finding work, suggests to me that there is a glut of newly minted jr developers who, one, have trouble showcasing their abilities, unable to stand out enough to get noticed by employers. Often, portfolios lack enough projects and application of sufficient technologies to separate them from other bootcamp graduates. A trap of bootcamps is that graduates often have the same or similar projects, employers may balk when seeing the slate of "bootcamp" projects.

Second, often too many jr web devs are chasing fewer jr dev roles since companies want to entrust experienced devs with their codebase. Many job roles specify many technologies and years of experience. Newly minted jr devs often get discouraged, expectations tempered by difficulty in getting a job shortly after boot camp completion. Boot camps themselves often over-promise and provide scant preparation in the way of white boarding and mock interviewing. Some even close their doors prematurely. I have fallen prey to the latter.

It is even harder for someone from the inner city and historically underprivileged geographic areas of NYC to get a start in tech. For some people, timing is everything, time and money (or lack thereof), may only afford many ONE opportunity or crack to get this right. Too many of us (of which I associate myself) need the help, assistance, preparation & practice to succeed in the tech field or to hone and put into practice the tools to attain work, switch careers and empower the jr web dev. These skills must be used to not seem newfangled.

It is with concern that I envisage persons of color, entrepreneurial types, who network, seeking people to pitch ideas to, have ideas, and look to pitch the right idea to anyone who would listen. This group may need a website or something a bit beyond your typical wordpress, wix site, something that features them and their ideas in unique ways - but cannot afford a website.

The problem I feature is that of the inner city jr web dev, drawn to tech, either because college track is not a good fit, or increasingly because of the pull and allure of working in tech matched somehow with the entrepreneurial persons from historically underprivileged communities.

I can only think of the many examples from the former: high school dropout who successfully started his made custom t-shirts & caps on E 174 St about 5 years ago, only to have his spray paint embroidered designs stolen and monetized on the internet by copycats only because that person did not have the online presence or website to self promote. Or a friend of mine who was spray painting bicycle frames in metallic finishes but did not have the online/social presence to bank on it.

Obviously, these are not simply contretemps for people. If the timing would have been better or they would have promoted better, they could have turned those ideas in businesses. Increasingly to start a small business, folks need websites and ways to promote. These are increasingly on social media and require planning and money to effect those ideas.

I do not propose to teach inner city entrepreneurs how to use social media tools to market themselves nor propose holistic approaches to get jr web developers the job support and company connections that programs like the Knowledge House are doing currently.

I only want to tackle the problem of the inner city jr dev, either self-taught, new minted boot camp graduate, female of color trying to enter male-dominated tech scene, starting in NYC & Jersey City in and around inner city neighborhoods, who are needing the practice, want to do new projects to keep coding skills fresh, who want to get cracking...

And the entrepreneur, who does not have to spend money one may not have or risk everything, but only needs an assist with promotion, may be a website, differentiated enough from the many Wix, Wordpress or Shopify apps out there, enough to get popping...

I propose a way for the entrant web developer, from the inner city, historically underrepresented in tech, to find the entrant entrepreneur who cannot afford a website; a Nextdoor (https://about.nextdoor.com/) type web app, where devs in the area can meet entrepreneurs in the area, arrayed to help one another symbiotically.

First thing this app has to do is find jr developers/programmers in targeted geographic areas who want to do projects, either for a small nominal fee, but mostly for experience and to assist entrepreneurs in the same or similar geographic areas. We advertise using mailchimp, google ads for search queries for inner city alongside small biz consulting, etc. Sign-up is free, made as a web application, mobile responsive to run across mobile, tablet and desktop spaces. Developers have to know they own their projects, and

expect that by taking on any projects, the people they are assisting will provide free social media promotion and attribute the website to the developer. And we release the developer from any liability associated if the website breaks. We insist on completion but do not require it. Also, we maintain a loose definition of an entrepreneur: necessarily someone who may be starting with no money, who may want something as simple as static portfolio, may want to switch from templated website, etc

Second, we need to build up a network of fledgling businesses, small biz, entrepreneurs, would-be entrepreneurs, anyone willing to take a plunge, very general, but alongside simple, need based sign-up, namely: suggest a fee for service, and have a financial aid form to have something that attests to need.

To find them, we advertise around search queries for self-employment aids, inner-city nonprofit, need-based programs and charitable organizations assisting with self-sufficiency and entrepreneurship. We blitz certain geographic areas with fliers; outreach at churches, bodegas, on the street if necessary. I envision having an ad campaign around word of mouth, fliers and partnerships with nonprofits already doing the work of assisting. We visit small businesses, co-opted spaces, and parks.

Third, we need sponsoring companies or industry types, existing programs/nonprofits already doing the work. We scrape data to find which companies promote diversity and encourage hiring within the inner city, enlist companies to sponsor developers who sign up and take on user projects; raise nominal costs to maintain the website and provide programming tools for developers to buy domain names and web hosting; solicit company pledges to provide human capital in the form of programmer volunteers consulting and helping ir developers with projects or questions.

The app I envisage is one that simply connects web developers with people or businesses that need them who necessarily cannot afford to pay for. The app will not prevent businesses who can pay and will strongly suggest that small businesses or entrepreneurs directly pay developers registered. To demonstrate need we will have a form on each webpage offering financial aid. Another page will have income brackets and suggested contributions to developers. The web application will not have direct payments or payment systems to developers. As for sponsors, we will have an informational page with a sponsor list for developers to take advantage of. In no way will the website be liable if users do not like websites that result from the connections made on the website. We do not employ developers, we simply refer users who need websites or other apps with developers who want to take on projects necessarily for the

experience and to add to their portfolios for the benefit of adding to their resumes or building up their portfolios.

And small business users will not hold web app creators for outcomes of websites or other projects that developers on the site create for users. The arrangement is akin to someone getting a free haircut from first time barbers, or getting dental work from students with dental school systems. The major difference is there is no minimum liability on our part. We are a mission-driven application that is a referral service and connects developers to entrepreneurs or small biz owners who would not otherwise seek out devs.

Web Application

The name of the application edSBe program or **Economically Disadvantaged Small Business & Entrepreneurship** referral program or spanish acronym pEEEd or PEyEED.

The application will have an about page with a hero image of a small business minority related image. The mission statement of is

Connecting economically disadvantaged businesses & entrepreneurs with designers and web developers from the same communities, edSBe aims to bridge the chasm between technology that businesses need while honing new developer skills to create websites and projects for entrepreneurs to showcase themselves. Our users promote developers on their social media platforms in symbiosis for the hood, within the hood, for the benefit of the hood.

Each new developer entrant creates a profile of a skill set, where he/she is from and some featured projects from the portfolio. Developer skill set and background is self-reported. Developers can create, read, update not delete posts about his/her background and skill set that will be on a show page after the developer or entrepreneur user signed up. They see user/entrepreneur posts on a show page after sign-up; it is the landing page after log-in.

Each new user creates a profile detailing type of business or type of expected business, ideas or anything and will specifically mention how a website or simple web application can grow a business or showcase skill or service. Users can create, read, update but

not delete posts. Users see developers post on a show page after sign-up; landing page after log-in session.

Both users and developers can delete posts after 15 days to have a continuous list of posts on the landing page.

Developers have the added ability to add up to three (3) users in a group, but cannot delete the users until a user has tagged that developer with completing a webpage or web application for that user.

The administrator has full CRUD abilities over users and developers and can delete both account types and all posts.

After both users(businesses/entrepreneurs) and developers create profiles, they only view the others posts: developers land on user show all posts & users land on show all developer posts. Users can then click on a developer of interest and either

- 1 chat with that developer using IRC within the app
- 2- Chat solution using javascript library or implemented with vanilla javascript. An online indicator will pop up if the developer is currently using the app, simply implemented via session and cookie, or again using equivalent javascript solution and node on the back-end.

Developers then can agree to take on a project or work on an user's request based wholly on chat between the parties or on the profile. This is where developers can add users to their working group.

*For the MVP, though the app will have a page where payments are suggested from user to developer, this is not required and there will not be a payment system set up, whether using Stripe or other payment platforms. Later features may feature developer spaces where they can add links to payment systems or have them in-app. Again via IRC or other stream chat solutions, users and developers are set up to have ad-lib or impromptu interactions. Too many conditions for sign-up or requirements will not be in the MVP, or at least not coded. We encourage and suggest users reimburse developers for minimal costs associated with the launching and possible testing of the site.

The web app administrator will actively recruit companies for the stated purpose of covering developer costs associated with website, app launches. Again not a

requirement as the edSBe program MVP app will simply have distinct sign-up and profile pages for users (businesses & entrepreneurs) and developers and push for chat interaction between the two parties. Again we have disclaimers for both parties. For developers, the control to add users to the active group is theirs since they should ultimately decide what project/website to take on.

And users can not hold developers liable for services; there are no contracts unless users and developers do so between each other without; not under the auspices of the web application.

For developers, we cannot guarantee any user contractual follow-through on the social media promotion. Again, we have a separate form on testimonial page, where users, identity and select among registered developers, db query, and then via simple emoji tags, happy or lukewarm, they may comment on the experience on testimonial page.

Testimonial page:

A user may only provide testimony on a registered developer. The form field for developers will make a database check for registered developers. If a developer feels the user dogged them out unnecessarily, they may notify the site administrator, who on the MVP, will review testimonials first, for a short time, less than 24 hours, before it is live on the testimonial page.

Testimonial page is accessible to anyone who visits the site, irrespective of sign up and registration.

Sign-up for users will be instantaneous, sign up for developers will be reviewed by admin, and process as soon as administrator confirms, all sign-ups will have basic oauth, email authentication.

Developers will be supported by the web application admin having AWS group subscription and group hosting to support developer costs, but we will not pay developers directly. Users are encouraged on the web application to provide payment to web developers and are reminding on sign up that developers are essentially loaning their time to become better developers and for the practice, loosely akin to resident gaining experience, expectation that this is a beginner.

For users, during sign-up, we retain financial aid form where the user self-reports income and chooses brackets, a very basic means test.

Future feature/addition to include the ability for developers to see the testimonial page from other developers reporting via comments about free promotion received from users. Registered developers who are signed up can see developer comments and see the registered user (business or entrepreneur) registered name but developers who are browsing the web app and not signed in see redacted username or last 3 char.

Finally there is a contact us page for developers and business users for comments. Though the admin is the super user and can delete any user type, MVP will primarily connect business users of any type self-reported with developers looking to assist in their communities and free promotion and extra projects to promote. Other iterations of the web application may include payment and incentive system and incorporate company sponsor feedback.