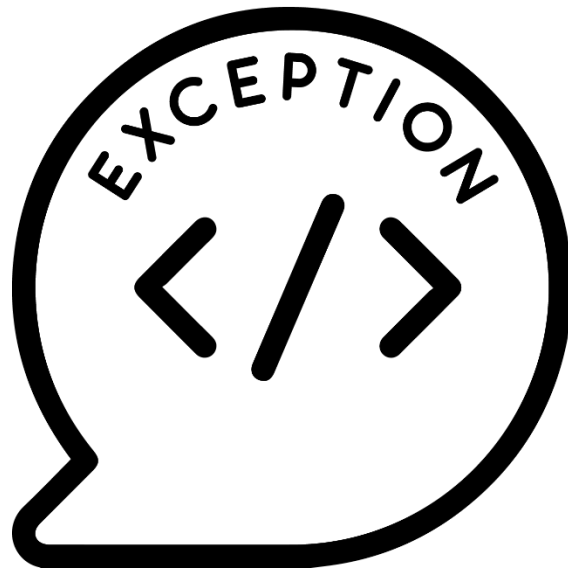


Exception Null



Project Team Members

Gabriel Ho	Project Manager
Chengsu Chen	Designer
Kodlee Yin	Developer
Jonathan Li	Developer

Problem Statement

There is a 3.6% unemployment rate and 263,000 unfilled jobs in the tech industry as of 2017. This, despite the fact that there were 116,00 tech graduates across colleges in America in 2016. Schools do an amazing job of giving us the foundational skills to work in tech but there is a gap between the classroom and the office. Our platform aims to bridge the void through challenges that emphasize best-practices and real-world interactions. In addition, every paying user will be putting money towards goodwill causes for those who may not be able to afford it.

[Website](#) | [Video](#) | [Poster](#)

Overview

Exception Null is a gamified code-learning platform that presents you with interesting and challenging real-world problems. This is done through a network of peer-reviewers (called gurus) and learners (called users). Users will opt into a challenge (with a choice of single-player, group-challenge, and a versus option for both). From here, users will work to solve a real-world problem. Their solutions will be reviewed by gurus that provide detailed feedback and scores.

- [Landing](#)
An attention-grabbing, fulfilling experience that invites the user to try our platform.
- [Dashboard](#)
An overview for a registered user that shows them relevant information about their learning or reviewing. Here users will be able to monitor their growth or check if they have any pending challenges or reviews to complete. Users will also be able to view their history and review their previous submissions.
- [Challenge](#)
Here a user enters the challenge arena. This area is specially designed to emulate that of an integrated development environment (IDE) within the browser. This area shows the user their challenge and provides a means of testing and completing it.
- [Review](#)
This section allows peer-reviewers to selectively comment on a user's challenge submission. Given industry tools to mark and edit code, peer-reviewers will use their experience to lead users onto the right path for their future challenges.
- [Feedback](#) Finally, the user will be able to view the feedback they received from a peer reviewer in this area. Comments and scoring are shown in logical order and, completing the peer-review toolkit, organizes improvement comments so that the user can learn and grow.

Technologies

As a code-improving service, we wanted a platform that was pervasive and useful. It didn't make sense for a coding platform to be on mobile as one would very rarely (if ever) be developing on a mobile device. We opted to target the computer (desktop, laptop), and chose a website as a result. This not only fell into our design and developer teams' strengths, but also provided the most relevant technology for developers today.

- GitHub Repo: <https://github.com/DumplingLTD/ExceptionNull>
- [Java](#) (language), [Spring Boot](#) (java web server library), [Pebble](#) (spring templating engine)
Web stacks are fairly trivial in the sense that, any major server stack will act identical to one another. For our case, we chose a stack that we had little to no experience with as, this is Capstone, and we wanted to learn! Java being a language our developers were comfortable with, and Spring Boot + Pebble a commonly used combination of libraries, we were confident that this backend would provide the functionality required to run our service.
- [Digital Ocean](#) (server hardware)
One of the most cost-effective, reliable managed hardware providers on the market today.
- HTML, [SASS](#) (CSS), Javascript | [jQuery](#), [jQuery Easing](#), [HighlightJS](#), [ChartJS](#)
As a web platform, you're very much squeezed to use HTML, CSS, and Javascript. SASS helps us organize the website's styles, but otherwise provides the same functionality as CSS. The Javascript libraries provide animation, animation helpers, code syntax highlighting, and dynamic graphical components; respectively.
- [MariaDB/MySQL](#) (database), [Connector/J](#)
A tested and tried database backend that allows for transactional guarantees and data replication. Also, a platform the developers are highly experienced in.
- Technical Documentation:
<https://github.com/DumplingLTD/ExceptionNull/blob/master/techme.md>

12-Month Budget Breakdown

Cost Item	Monthly Cost	One-Time Cost	Total Cost	Notes
MONTHLY COSTS				
Employee Salaries	\$-	\$-		As founders, we are not expecting to take salary, putting it all to cashflow.
Employee Payroll Taxes and Benefits	\$-	\$-		
Rent/Lease Payments	\$1,000	\$12,000	\$12,000	Assuming we are working out of a garage and essentially rent an apartment.
Mortgage Payments	-	\$-		
Advertising/Promotion/Web Site	\$1,000	\$12,000	\$12,000	Targeted guerilla marketing campaigns on a small budget.
Postage/Shipping	\$20	\$240	\$240	Possible postage of check payments.
Supplies	\$20	\$240	\$240	
Utilities	\$40	\$480	\$480	
Other Taxes	\$-	\$-		
Insurance	\$-	\$-		For the first year we will be responsible for personal insurance as we establish the company with lean expenses.
Interest Expense	\$-	\$-		
Bank Service Charges	\$50	\$600	\$600	Account set-ups etc.
Repairs & Maintenance	\$-	\$-		
Professional Services - Legal, Accounting	\$2,000	\$24,000	\$24,000	This includes running Digital Ocean instance, domain name payment, and other service upkeep costs. Will have to increase as number of users grow.
Travel & Entertainment	\$400	\$4,800	\$4,800	For flights to potential trade shows and marketing events etc.
Miscellaneous	\$500	\$6,000	\$6,000	For unforeseen circumstances.
Total Monthly Costs			\$60,36	

Initial Startup Costs

Cost Item	Total Cost	Notes
ONE-TIME COSTS		
Land	\$-	Will not own land yet.
Building(s)	\$-	Will not have a building in the first 12 months.
Furniture & Fixtures	\$3,500	For work stations and home office.
Computer Equipment	\$6,000	
Computer Software	\$1,000	For potential necessary software and dev environment.
Security Deposit(s)	\$2,000	Rent deposit + other miscellaneous fees.
Business Licenses/Permits/Fees	\$3,500	Miscellaneous software licensing fees and partnership fees with companies.
Advertising/Promotion/Web Site	\$500	
Professional Services - Legal, Accounting	\$-	
Cash-On-Hand (Working Capital)	\$20,000	Seed money. 30% of estimated 12mth OpEx.
Miscellaneous	\$10,000	Emergency fund.
Total One-Time	\$46,500	
Total Monthly Costs	\$60,360	
Total Startup & 1 st Year Costs	\$106,860	After 12 months, will evaluate to see if acquisition is on the cards. Otherwise, budget review after 12 months.

Revenue Model

Item	Amount	Notes
Outflows:		
Beneficiaries	\$5/user/month	
Evaluator	\$0.25 - \$1 per evaluation, depending on the length and complexity of the module.	Average earnings of \$15/mth
Server	\$ -	Negligible per user cost when scaling considered.
Inflows:		
Subscription	\$29/month or \$20.99/month with total upfront.	
Finder fee for job opportunities	20% of first month salary.	
Nominal Partnership Pricing	Varies depending on involvement with our organization.	
Varies depending on level priority of candidate picking.		
Margins:		
Operating profit	\$4.99/paying user/month	
Partnership	\$1000/partner/month	
Recruiting	\$1500/hired user/month	

Exception Null Terms and Conditions of Use

1. Terms

By accessing this website and engaging in our services, you are agreeing to be bound by the website's Terms and Conditions of Use, all applicable laws and regulations, and agree that you are responsible for compliance with any applicable local laws. If you do not agree with any of these terms, you are prohibited from using or accessing this site. The materials contained in this website are protected by applicable copyright and trademark law.

2. Use License

Permission is granted to temporarily download one copy of the materials (information or software) on Exception Null's website for personal, non-commercial transitory viewing only. This is the grant of a license, not a transfer of title, and under this license you may not:

1. modify or copy the materials;
2. use the materials for any commercial purpose, or for any public display (commercial or non-commercial);
3. attempt to decompile or reverse engineer any software contained on Exception Null's website;
4. remove any copyright or other proprietary notations from the materials, or transfer the materials to another person or "mirror" the materials on any other server.
5. This license shall automatically terminate if you violate any of these restrictions and may be terminated by Exception Null at any time. Upon terminating your viewing of these materials or upon the termination of this license, you must destroy any downloaded materials in your possession whether in electronic or printed format.

3. Disclaimer

The materials on Exception Null's website are provided "as is". Exception Null makes no warranties, expressed or implied, and hereby disclaims and negates all other warranties, including without limitation, implied warranties or conditions of merchantability, fitness for a particular purpose, or non-infringement of intellectual property or other violation of rights. Further, Exception Null does not warrant or make any representations concerning the accuracy, likely results, or reliability of the use of the materials on its Internet website or otherwise relating to such materials or on any sites linked to this site.

4. Limitations

In no event shall Exception Null nor its Gurus be liable for any damages (including, without limitation, damages for loss of data or profit, or due to business interruption,) arising out of the use or inability to use the materials on Exception Null's Internet site, even if Exception

Exception Null or a Exception Null authorized representative has been notified orally or in writing of the possibility of such damage. Because some jurisdictions do not allow limitations on implied warranties, or limitations of liability for consequential or incidental damages, these limitations may not apply to you.

5. Revisions and Errata

The materials appearing on Exception Null's website could include technical, typographical, or photographic errors. Exception Null does not warrant that any of the materials on its website are accurate, complete, or current. Exception Null may make changes to the materials contained on its website at any time without notice. Exception Null does not, however, make any commitment to update the materials.

6. Links

Exception Null has not reviewed all the sites linked to its Internet website and is not responsible for the contents of any such linked site. The inclusion of any link does not imply endorsement by Exception Null of the site. Use of any such linked website is at the user's own risk.

7. Site Terms of Use Modifications

Exception Null may revise these terms of use for its website at any time without notice. By using this website, you are agreeing to be bound by the then current version of these Terms and Conditions of Use.

8. Partnerships

Exception Null is a social enterprise that partners with companies to create opportunities for those who may not be as privileged. Exception Null reserves the right to terminate a partnership for any reason. Additionally, Exception Null reserves the right to sever agreements with Gurus for any reason. If fraudulent activity is uncovered, regardless of intention, Exception Null reserves the right to ban access to our service and withhold any outstanding credit accrued.

9. Governing Law

Any claim relating to Exception Null's website shall be governed by the laws of the State of Washington without regard to its conflict of law provisions.

Exception Null Privacy Policy

Your privacy is very important to us. Accordingly, we have developed this Policy in order for you to understand how we collect, use, communicate and disclose and make use of personal information. When becoming a Guru, we will require additional personal information to verify credentials as well as facilitate remittance of earnings. The following

outlines our privacy policy.

- Before or at the time of collecting personal information, we will identify the purposes for which information is being collected.
- We will collect and use of personal information solely with the objective of fulfilling those purposes specified by us and for other compatible purposes, unless we obtain the consent of the individual concerned or as required by law.
- We will only retain personal information as long as necessary for the fulfillment of those purposes.
- We will collect personal information by lawful and fair means and, where appropriate, with the knowledge or consent of the individual concerned.
- Personal data should be relevant to the purposes for which it is to be used, and, to the extent necessary for those purposes, should be accurate, complete, and up-to-date.
- We will protect personal information by reasonable security safeguards against loss or theft, as well as unauthorized access, disclosure, copying, use or modification.
- We will make readily available to customers information about our policies and practices relating to the management of personal information.
- We will never sell or distribute personal information for any reason other than when subpoenaed by the law.
- A user may choose to close their account at any time, in which case we will remove all personal information associated with that account, unless otherwise requested.

We are committed to conducting our business in accordance with these principles in order to ensure that the confidentiality of personal information is protected and maintained.