



Building the World's Library

GSoC 2019 Proposal for Internet Archive's Open Library

Let's add a "Sponsor this Book" button to OpenLibrary.org and enable our international audience to contribute towards building a true Open Library.

Tabish Shaikh Indian Institute of Technology, Jammu.

I've been a contributor to the Open Library project for over a year. I joined the community because I was inspired by Aaron Swartz and his vision for an Open Library. I see Google Summer of Code as an opportunity to make a significant community impact through my proposal for a Book Sponsorship Program, to play a small role in the open source community, and raise funds for a non-profit organisation that I love.

Email: tabish.shaikh91@gmail.com

Website: <https://tabshaikh.github.io/portfolio/>

Twitter: https://twitter.com/tab_tabshaikh

GitHub: <https://github.com/tabshaikh>

Location: Pune, India.

Timezone: UTC+5:30 hours

University: Indian Institute of Technology, Jammu.

Major: Computer Science and Engineering (CSE)

Degree level: 3rd year undergraduate, BTech. (Bachelor of Technology)

Graduation year: 2020

Building the World's Library

Open Library is a non-profit website run by Internet Archive. It tries to catalog every book in the world and has web pages for over 27 million book editions. As of 2019, Open Library's catalog contains information on 25M book editions -- 4M of these editions are made available online, in digital form, for patrons to read or borrow through the Internet Archive's [Controlled Digital Lending \(CDL\)](#) program. Open Library aspires to be the "Wikipedia" of books -- i.e. a catalog containing one webpage for every book ever published.

Importance


As a digital library with no central, physical location, Open Library plays a critical role in equalizing book access to an international audience. Not every city is endowed with a state-of-the-art library. Some towns, even in the wealthiest countries, don't have libraries at all. Open Library is an opportunity to provide equal opportunity to readers all over the globe. Today, Open Library is limited to the books Internet Archive decides should be acquired and made available through their library program. But there's an **opportunity** to democratize Open Library's bookshelves and extend this power to patrons so every reader in the world may be empowered to Sponsor books of their choosing.

Why now?

Last year, Open Library added a Want to Read button to their website enabling patrons to tell us which books we are missing from the library. Over 400k unique patrons clicked this button since we added it, teaching us that patrons are eager to tell us which books they want. I believe some percentage of these patrons may also be willing to make a monetary donation to sponsor the accessioning of these desirable books. This motivation let us to starting a books sponsorship program.

Proposal

For GSoC 2019, we'd like to test this hypothesis by adding a `Sponsor this Book` button that will show up on the 23M remaining books which Open Library knows about but have not



yet been obtained. Success will mean an important new distribution channel for Open Library donations and empowering our patrons with the capability to democratize our holdings.

Impact

For Open Library, success means establishing an new distribution channel to receive donations and promoting long term sustainability. We also hope to improve and democratize our holdings by empowering thousands of patrons to participate in book sponsorship. We hope that in the fiscal year following the release of this feature, .25% (quarter of a percent) of unique patrons who are currently clicking the “Want to Read” button will make a donation of ~\$25 to sponsor a book. I believe this conversion rate is conservative because it’s one tenth of the global average conversion rate across industries in 2018, which was 2.63%[\(Source\)](#).

Using our “Want to Read” numbers from 2018, the outcome equates to \$25,000 (i.e. $400k * .0025 = 1k \text{ uniques} * \25) in donations and 1,000 new books. Even if the conversion rate were .1% (one tenth of one percent), the campaign would still earn \$10k, unlock 400 books, and more than outweigh the investment costs of the GSoC program.

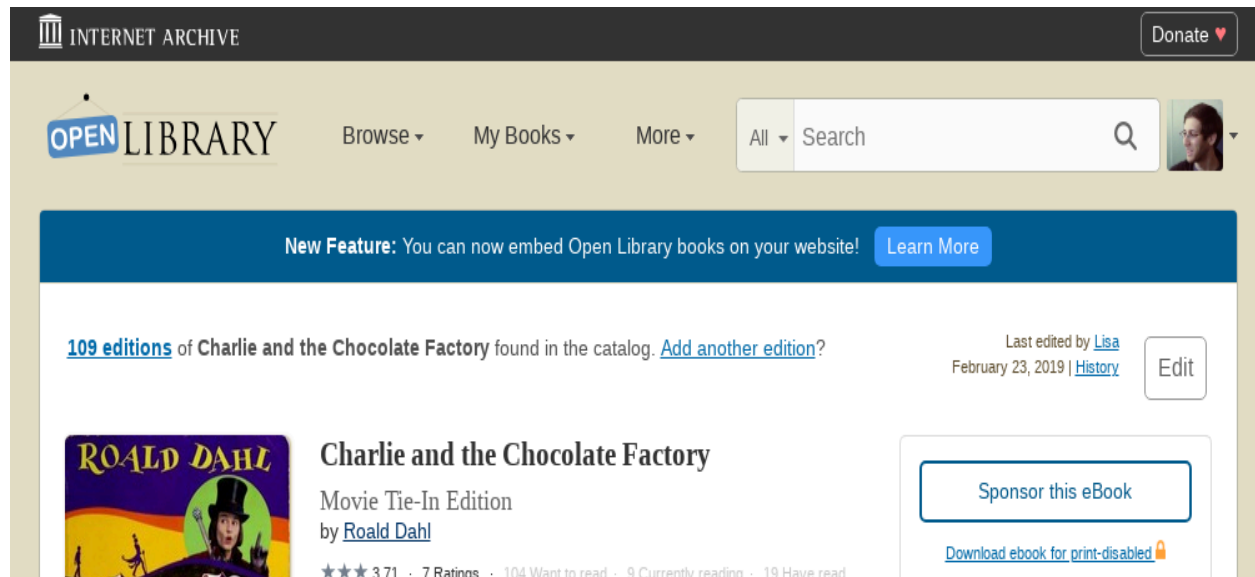
Detailed Proposal:

The Book Sponsorship Program provides patrons a way to fund the missing books they want. Patrons will be presented with a flow to make a monetary donation which will cover the costs of purchasing the book, shipping it to Internet Archive’s San Francisco offices, digitizing the book at the SF scanning center, and the costs of storage (both physical and digital) within the organization’s physical and digital archives.

User-Flow

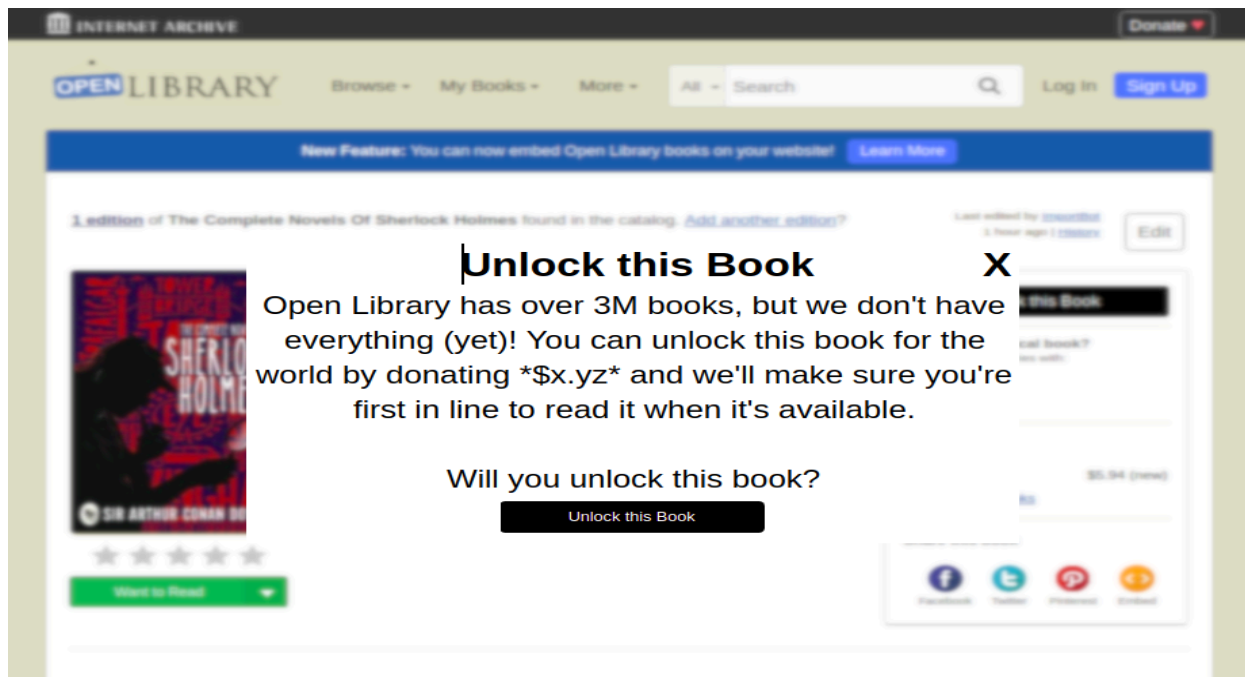
There are two ways a patron may enter the flow for sponsoring a book. The first is through the Open Library website, which will then forward the patron to a book sponsorship page on Archive.org. The second is directly through this book donation page on Archive.org.

The first entry point is through Open Library's books page:



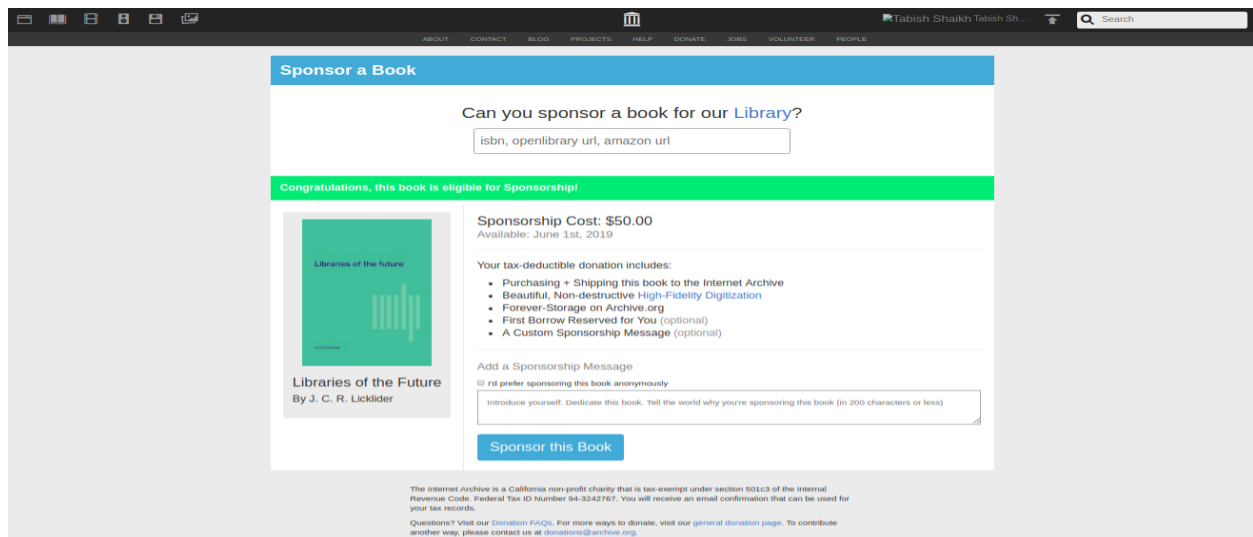
[https://openlibrary.org/books/OL26694746M/Boom Town The Fantastical Saga of Oklahoma City its Chaotic Founding... its Purloined Basketball Tea](https://openlibrary.org/books/OL26694746M/Boom_Town_The_Fantastical_Saga_of_Oklahoma_City_its_Chaotic_Founding..._its_Purloined_Basketball_Tea)

- The patron discovers a book on Open Library which is not yet available
- The page presents the patron with a [Sponsor this Book] button (with blue border, white background, blue text)
- Clicking this button opens a modal on the Open Library books page (show modal text in diagram) which brings the patron to the Archive.org Book Sponsorship page to complete their sponsorship.
 - Additional information (like book identifier, username, and referring service) are passed to the Archive.org Book Sponsorship Page so that it may be preloaded with the right information: e.g.
<https://archive.org/~mek/donate/sponsor-a-book/index.php?src=openlibrary&username=@tabishBot&bookid=OL26694746M>



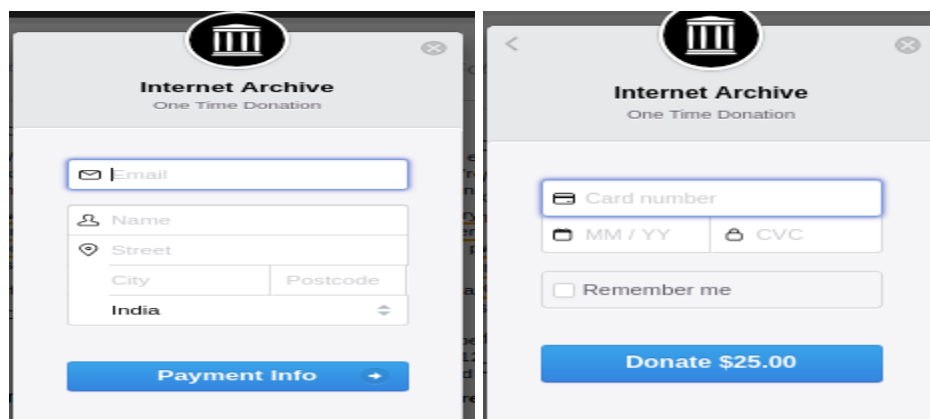
- Clicking **Sponsor this book** brings you to...

The second entry point is directly through Archive.org's Book Sponsorship page:



- To decide which books are eligible for sponsorship we would have a **Policy Check API** that determines whether the book meets our policy guidelines. We would also prioritize editions on IA wishlist and editions with long waitlists.
- And the result is, when the page loads, the input box will already have the right ID in it because we have the GET query parameters*, the website checks (without reloading, using javascript):
 1. the book price using the openlibrary isbn/price API
 2. the book policy eligibility (via an API)
- User clicks "Proceed with Donation"

A stripe modal pops up with payment information:



On finalizing payment, user gets sent to a receipt + thank you page.

The second entry would be through a **Book Sponsorship** page on Archive.org :

- Imagine you are a random visitor on the web
- You got to Archive.org or surf the web and you learn that we have a new Book Sponsorship program
- You click the link and you land on <https://archive.org/~mek/donate/sponsor-a-book/index.php> (we'd call the url something different like https://archive.org/donate/books) (edited)
- You arrive at https://archive.org/~mek/donate/sponsor-a-book/index.php and it has an input box to enter an ID (amazon, openlibrary, isbn)
- As you type the ID, the website checks (without reloading, using javascript):
 1. the book price using the openlibrary isbn/price API
 2. the book policy eligibility

The javascript adds text to the <https://archive.org/~mek/donate/sponsor-a-book/index.php> page:

Sponsor a Book

Can you sponsor a book for our [Library](#)?

isbn, openlibrary url, amazon url

Congratulations, this book is eligible for Sponsorship!

Sponsorship Cost: \$50.00
Available: June 1st, 2019

Your tax-deductible donation includes:

- Purchasing + Shipping this book to the Internet Archive
- Beautiful, Non-destructive [High-Fidelity Digitization](#)
- Forever-Storage on Archive.org
- First Borrow Reserved for You (optional)
- A Custom Sponsorship Message (optional)

Add a Sponsorship Message

☐ I'd prefer sponsoring this book anonymously

Introduce yourself. Dedicate this book. Tell the world why you're sponsoring this book (in 200 characters or less)

Sponsor this Book

The Internet Archive is a California non-profit charity that is tax-exempt under section 501(c)(3) of the Internal Revenue Code. Federal Tax ID Number 94-3242767. You will receive an email confirmation that can be used for your tax records.
Questions? Visit our [Donation FAQs](#). For more ways to donate, visit our [general donation page](#). To contribute another way, please contact us at donations@archive.org.

- User clicks "Proceed with Donation"

A stripe modal pops up with payment information.

On finalizing payment, user gets sent to a receipt + thank you page.

Roll-out Plan

During the pilot phase of this project, we will limit access of the “Sponsor this Book” button to a specific group of sponsors (<https://openlibrary.org/usergroup/sponsors>) so we can control the experience and incorporate feedback efficiently. Then after setting up the whole process we would open this program for all the world's users. The sponsorship will entail a fiscal donation to cover the cost of purchasing, shipping, digitizing, and hosting the book. The stages of the roll-out plan are:

- **v0** only “blessed” administrators are able to participate in the Sponsorship.
- **v1** only “blessed” patrons are eligible to participate in Sponsorship Pilot. Patrons may request an invitation to join Sponsorship Pilot via a landing page/ a google form (which emails openlibrary@archive.org)
- **v2** public release with a blog post

Instrument basic analytics tracking:

We would like to have analytics tracking on our buttons and a campaign/flow so that we can track where there's drop-off at different parts of the conversion funnel. For instrumentation(ie. log button impressions and button clicking we could use [navigator.sendBeacon](#) and [google analytics](#). The steps involved will be:

Steps

1. Determining how we can instrument? We would want to send events somewhere when the button shows and when it's clicked... and various other stages. We would need a database. We can automate the process by using [google analytics](#). [navigator.sendBeacon](#) is also useful which helps us if the http request to register the event doesn't finish.
2. Thinking about what we want to do and what success looks like?- That would be the **impact** of my project. Other questions that pop up are
 - a. How many people click the sponsor book button?
 - b. How many of those people actually follow through
 - c. Do logged in users sponsor books? ..., etc
3. Using the above questions would help us in determining the data of the instrumentation campaign we can collect and what can we infer from it.

Additional Ideas:

- **Gift:** Sponsor a book as a birthday present or in someone's honor (with a note)
- **Matching:** Internet Archive pay ½ price if book is on Internet Archive wishlist
- **Badge:** On the users profile that he has donated the book towards the OL or a small note on the books page about who donated the book.
- Feature a homepage carousel of books w/ most "want to read" having no ebook
- Showing sponsorship messages on Open Library
- Handling email success messages
- A leaderboard of top sponsors!

GSoC Program Logistics

Mentor(s)

Michael E. Karpeles (@mekarpeles)

Meeting Timings: As the Open Library community meeting takes place on Tuesday, I would like friday/saturday for meeting as, if I am stuck somewhere it would help me clear my doubts easily without wasting a lot of time. ½ an hour to one hour time of meeting time would suffice.

Deliverables

The main goal of this project is to empower user's so that they can donate their favourite books to the Open Library thus enabling universal access to their donated books.

Components and estimated time:

Sr No.	Components	Estimated Time(For completion)
1.	Roles & Permissions for "Book Sponsor"	Done

2.	<p>Database of Book Sponsorships on Open Library (Which @user has donated which books?)</p> <ul style="list-style-type: none"> • Design database schema sql • Write models (see: Reading Log & User Follows examples) • Has book already been sponsored? 	<p>Approx. 1 week:</p> <ul style="list-style-type: none"> • 1 day - reviewing schema design for sql and reviewing basics. • 1 day - designing database and seeing implementation of Reading Log & User Follows examples. • 2 days -Implementing models • 2 days - For getting feedback, testing and merging the pr.
3.	<p>Design "Sponsor this Book" button</p> <ul style="list-style-type: none"> • Open Library Search results Page • Open Library Works' Editions table • Open Library Editions (books) Page 	<p>3 days:</p> <ul style="list-style-type: none"> • 1 day - for implementing the decided designs as shown above. • 1 day - For testing, getting feedback, merging of pr. • 1 day -For coming up with alternative designs which would be used in A/B testing of these components and getting feedback on these.
4.	<p>Modal - Researching about modal design and implementing</p>	<p>2 weeks(approx.):</p> <ul style="list-style-type: none"> • 1 day - For finishing implementing modal view with available OL modal view. • 1 day - For researching different modal designs and coming up with a design which we are proud of. • 5 days - Implementing the components which we originally thought for archive.org donation page • 1 day - For testing, getting feedback, merging of pr.
5.	<p>Implement analytics tracking for pilot</p>	<p>4 days:</p> <ul style="list-style-type: none"> • Finalizing the campaign plan with the community. • Reading about analytics tools such as google analytics, Optimizely etc and

		<p>determining the best tool for our purpose.</p> <ul style="list-style-type: none"> Implementing button click-tracking and essential data for conversion funnel analysis
6.	<p>Book Sponsorship Page</p> <ul style="list-style-type: none"> Policy Check (requires clarification from @mek) + check Sponsors list Payment Processing - Time to implement payment processing 	<p>2 weeks(approx.):</p> <ul style="list-style-type: none"> Integrating the policy check api - 2 days Research about stripe - 1 day Payment processing - 1 week using stripe as on archive's donation page 2-3 days - For testing, getting feedback, merging of pr.
7.	<ul style="list-style-type: none"> Thank you page Email Receipt 	<p>3 days(approx.):</p> <ul style="list-style-type: none"> 2 day - Design and implementation. 1 day - For testing, getting feedback, merging of pr.
8.	<p>Open Library account page (list what books you've sponsored)</p>	<p>3 days:</p> <ul style="list-style-type: none"> 2 day - Design and implementation. 1 day - For testing, getting feedback, merging of pr
9.	<p>Leaderboard of book sponsorships (/sponsors)</p>	<p>4 days:</p> <ul style="list-style-type: none"> 2-3 days - Design and implementation. 1 day - For testing, getting feedback, merging of pr. Then once the basic leader-board is set up coming up with a design that we are proud of(time taken to be decided based on availability)
10.	<p>Homepage "Sponsor Me" carousel</p>	<p>3 days:</p> <ul style="list-style-type: none"> 2 days - Design and implementation. 1 day - Testing and merging.

11.	Instrument basic analytics tracking	2 weeks(approx.)
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Required Deliverables

Phase I (Week 1 - Week 4): Core Infrastructure

Sr. 2. Database of Book Sponsorships on Open Library

Sr. 3. Design “Sponsor this Book” button

Sr. 4. Modal - Researching about modal design and implementing.

Sr. 5. Implement Analytics tracking

Sr. 10. Homepage “Sponsor Me” carousel

Phase II (Week 5 - Week 8): Checkout-flow

Sr. 6. Archive.org Book Donation Page

Sr. 7. Thank you page and Email receipt.

Phase III (Week 9 - Week 11): Tracking

Sr. 8. Open Library account page for list what books you’ve sponsored.

Sr. 9. Leaderboard of book sponsorships.

Sr. 11. Simple Instrument analytics tracking.

Phase IV (Week 12): Wrap-up

Blog post and documentation

Schedule:

May 27

Coding officially begins!

Week 1 + Week 2 (May 27 - June 10)

- **Sr. 2.** Database of Book Sponsorships on Open Library
- **Sr. 3.** Design “Sponsor this Book” button

Week 3 (June 10 - June 17)

- **Sr. 4.** Modal - Researching about modal design and implementing.

Week 4 (June 17 - June 24)

- **Sr. 5.** Implement Analytics (for A/B testing)

Week 5 (June 24 - July 1)

- **Sr. 10.** Homepage “Sponsor Me” carousel
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June 28 18:00 UTC Phase 1 Evaluation deadline

Week 6 - Week 7 (July 8 - July 15)

- **Sr. 6.** Archive.org Book Donation Page

Week 8 (July 15 - July 22)

- **Sr. 6.** Archive.org Book Donation Page

Week 9 (July 22 - July 29)

- **Sr. 7.** Thank you page and Email receipt.
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July 26 18:00 UTC Phase 2 Evaluation deadline

Week 10 (July 29 - August 5)

- **Sr. 8.** Open Library account page for list what books you’ve sponsored.

Week 11 (August 5 - August 12)

- **Sr. 9.** Leaderboard of book sponsorships.
- **Sr. 11.** Simple Instrument analytics tracking.

Week 12 (August 12 - August 19)

- **Sr. 11.** Simple Instrument analytics tracking.

Week 13 (August 19 - August 26)

- Blog post and documentation.

August 19 - 26 18:00 UTC	Final week: Students submit their final work product and their final mentor evaluation
August 26 - Sept 2 18:00 UTC	Mentors submit final student evaluations
September 3	Final results of Google Summer of Code 2019 announced

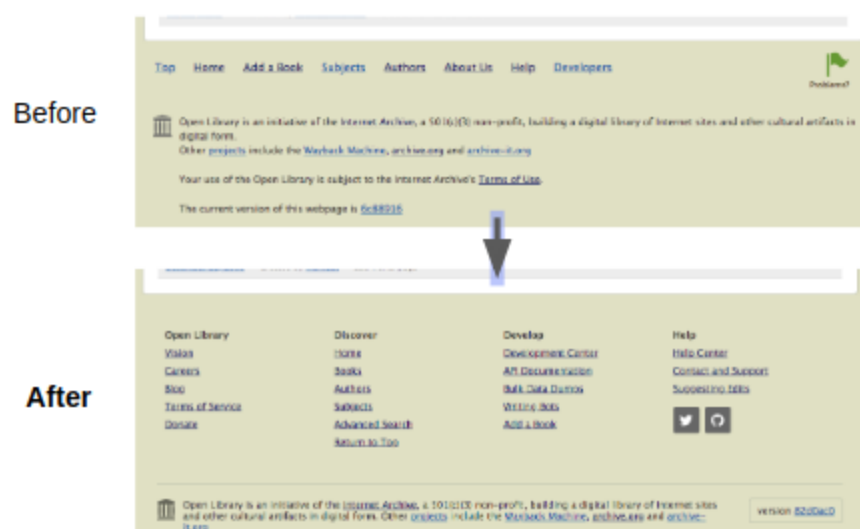
Why me?

Contributions to this repository

I joined the Open Library community around a year back and the first task I worked upon was redesigning of our website footer.

Issue number: <https://github.com/internetarchive/openlibrary/issues/908>

<https://github.com/internetarchive/openlibrary/issues/642>



Then went onto resigning the mobile login experience, making numerous front-end fixes and implementing style rules with Jon Robson, helping with internationalisation and Hacktoberfest coordination. Also have contributed to documentation such as the [Contributor's FAQ](#), changes in readme after removing vagrant and tens of minor fixes.



Other Projects:

Contributed to organisations such as [Tensorflow](#) (migrations of tf.contrib loss functions to tf.addons), ossn (contributed towards fixing the sidebar and improving the website's security to the repository [ossn/fixme](#) which connects new contributors to issues of different organisations according to the technology,labels,difficulty etc)

259 contributions in the last year

Contribution settings ▾

