



**Project Documentation For
PageTurner**

Submitted By

(Section 2, Team 1)

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CPSC 473 – Web Programming and Data Management

Prepared for:

**Prof. Kenytt Avery
California State University Fullerton**

1. Project Description:

PageTurner.com

- A web portal where book lovers will be able to browse through books, mark the books that they have read, are currently reading or the ones they wish to read by adding them in bookshelf.
- They can follow other users – the book list of users will be public to all
- Books, Genres, People

Personal links for registered users: – My Profile, My Bookshelf, Following

2. Modules:

Register User

Any user can register to site for free. To register user will have to enter his First Name, Last Name, Email-id, Username and Password. If username already exists registration will fail. Validation has been put on five fields. User can't add book to his bookshelf or follow other user before registering.

Login

User will have to enter his username and password for login. If username and password are correct then login will be successful else login will fail. If login is successful user will be able to search books, add books to his bookshelf, follow other users and update his profile.

My Profile

- o Can view profile

Once user has logged in successfully he can see all his details by clicking profile button in dropdown. User's Username, First Name, Last Name, Email-id, About

Me, Favorite and Bookshelf will be displayed. About me basically tells types of books user likes to read, Favorite displays user's favorite books, and Bookshelf gives list of books user presently reading or planning to read in future.

- o Can edit required fields

User can edit his details by clicking on option edit on side of field. User can only edit First Name, Last Name, About Me and Favourite. User won't be able to edit Username, Email -id and Bookshelf. Bookshelf will display list of books which are present in user's Bookshelf.

My Books

- o Search books

To search and view book details user need not be registered. User can search using title of book in top search box. List of books will be displayed in books tab having same title or books having same keywords in title. User can view more information about books such as author, publisher, length of book, user rating and QR code by clicking on more info/preview button. Only registered users will be able to add books in their bookshelf.

- o View books by Genre

Any user can search book based on its Genres. We display list of Genres in genre tab. User can select genre from genre tab then list of books belonging to that genre will be displayed. User can click on book and read its description. User can view more information about books such as author, publisher, length of book, user rating and QR code by clicking on more info/preview button. Only registered users will be able to add books in their bookshelf.

- o Bookshelf

Once user has logged in successfully user can search for books either using search

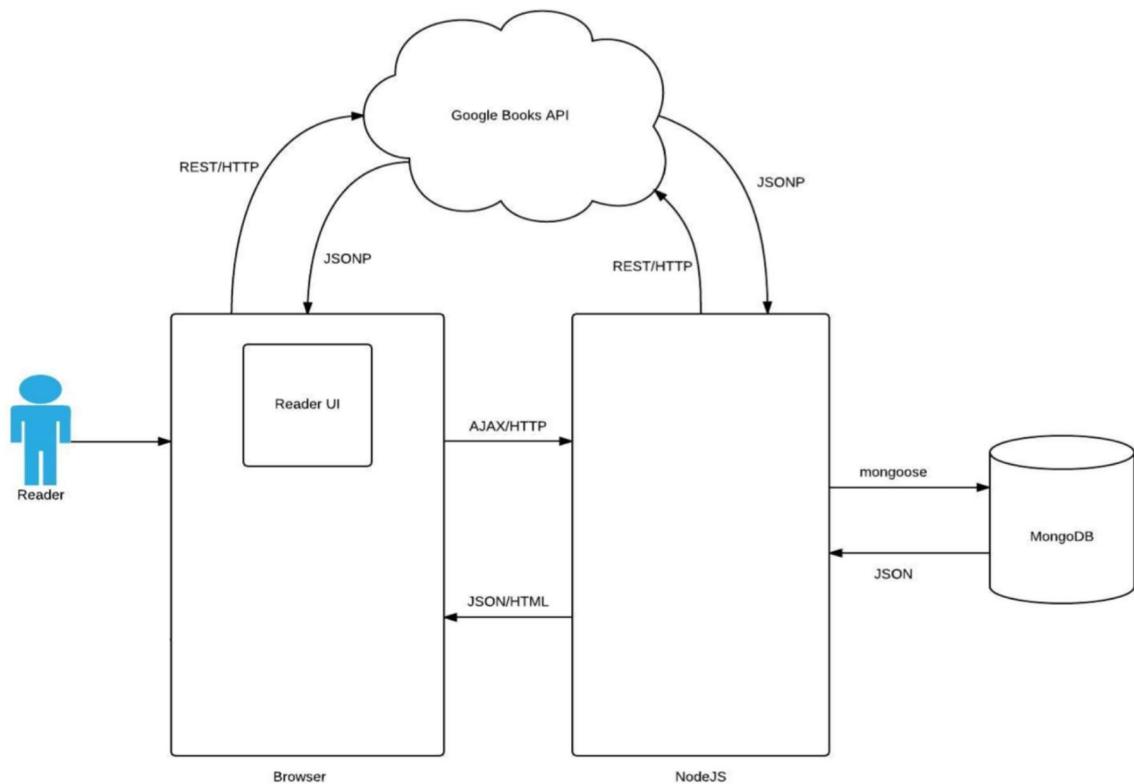
box or genre tab. After selecting book user can add book to bookshelf by clicking button add to bookshelf. Bookshelf tab consist list of all book user have added bookshelf. Books might be user presently reading or planning to read in future.

Following:

In people tab user can see all registered user. User can follow other user by clicking follow option below them. Once user starts following other user, user will be able to see his bookshelf. Bookshelf will display list of books other person presently reading or planning to read in future.

3. Architecture:

Google Book API will be used for this project. The architecture diagram for the system is as below:



4. Database

Mongo DB is used as a data store as well as a web API for the server side implementation for the website. It provides a simple interface for HTTP requests like GET, POST, PUT, PATCH and DELETE.

4.1 User's collection

Following object shows the structure of collection used for storing User's information.

```
{
  "_id" : ObjectId("5737a9d540a324fd0566b76e"),
  "username" : "nitesh",
  "password" : "nitesh",
  "email" : "nitesh@gmail.com",
  "firstname" : "nitesh",
  "lastname" : "joshi",
  "aboutme" : " Good reader",
  "favourite" : " A Walk to Remember ,The Last Song ",
  "bookshelf" : [
    "Game of Thrones",
    "The World of Ice & Fire"
  ],
  "follow" : [
    "nimesh"
  ]
}
```

4.2 Books collection

Following object shows the structure of collection used for storing books.

```
{
  "_id" : ObjectId("5737aa1340a324fd0566b770"),
```

"title" : "The World of Ice & Fire",
"subtitle" : "The Untold History of Westeros and the Game of Thrones",
"authors" : [
 "George R. R. Martin",
 "Elio Garcia",
 "Linda Antonsson"
],
"publisher" : "Bantam",
"publishedDate" : "2014-10-28",
"description" : "NEW YORK TIMES BESTSELLER • THE NEVER-BEFORE-SEEN HISTORY OF WESTEROS AND THE LANDS BEYOND • WITH HUNDREDS OF PAGES OF ALL-NEW MATERIAL FROM GEORGE R. R. MARTIN If the past is prologue, then George R. R. Martin's masterwork—the most inventive and entertaining fantasy saga of our time—warrants one hell of an introduction. At long last, it has arrived with *The World of Ice & Fire*. This lavishly illustrated volume is a comprehensive history of the Seven Kingdoms, providing vividly constructed accounts of the epic battles, bitter rivalries, and daring rebellions that lead to the events of *A Song of Ice and Fire* and HBO's *Game of Thrones*. In a collaboration that's been years in the making, Martin has teamed with Elio M. García, Jr., and Linda Antonsson, the founders of the renowned fan site *Westeros.org*—perhaps the only people who know this world almost as well as its visionary creator. Collected here is all the accumulated knowledge, scholarly speculation, and inherited folk tales of maesters and septons, maegi and singers, including • full-color artwork and maps, with more than 170 original pieces • full family trees for Houses Stark, Lannister, and Targaryen • in-depth explorations of the history and culture of Westeros • 100% all-new material, more than half of which Martin wrote specifically for this book The definitive companion piece to George R. R. Martin's dazzlingly conceived universe, *The World of Ice & Fire* is indeed proof that the pen is mightier than a storm of swords. From the Hardcover edition.",
"industryIdentifiers" : [
 {

PageTurner

```
        "type" : "ISBN_13",
        "identifier" : "9780345535559"
    },
    {
        "type" : "ISBN_10",
        "identifier" : "0345535553"
    }
],
"pageCount" : 336,
"printType" : "BOOK",
"categories" : [
    "Fiction"
],
"averageRating" : 3.5,
"ratingsCount" : 380,
"maturityRating" : "NOT_MATURE",
"language" : "en",
"id" : "hapdAAAAQBAJ",
"link" :
"http://books.google.com/books/about/The_World_of_Ice_Fire.html?hl=&id=hapd
AAAAQBAJ",
"thumbnail" :
"http://books.google.com/books/content?id=hapdAAAAQBAJ&printsec=frontcov
er&img=1&zoom=1&edge=curl&source=gbs_api",
"images" : {
},
"1" : {
    "username" : "nitesh"
}
}
```

5. Technology Used

- We have used client-side JavaScript/jQuery, Node.js, and MongoDB to build this web application.
- We have used Google books API as third-party Web Service APIs to fetch the books list.
- We have used Materialize CSS for front end development.
-

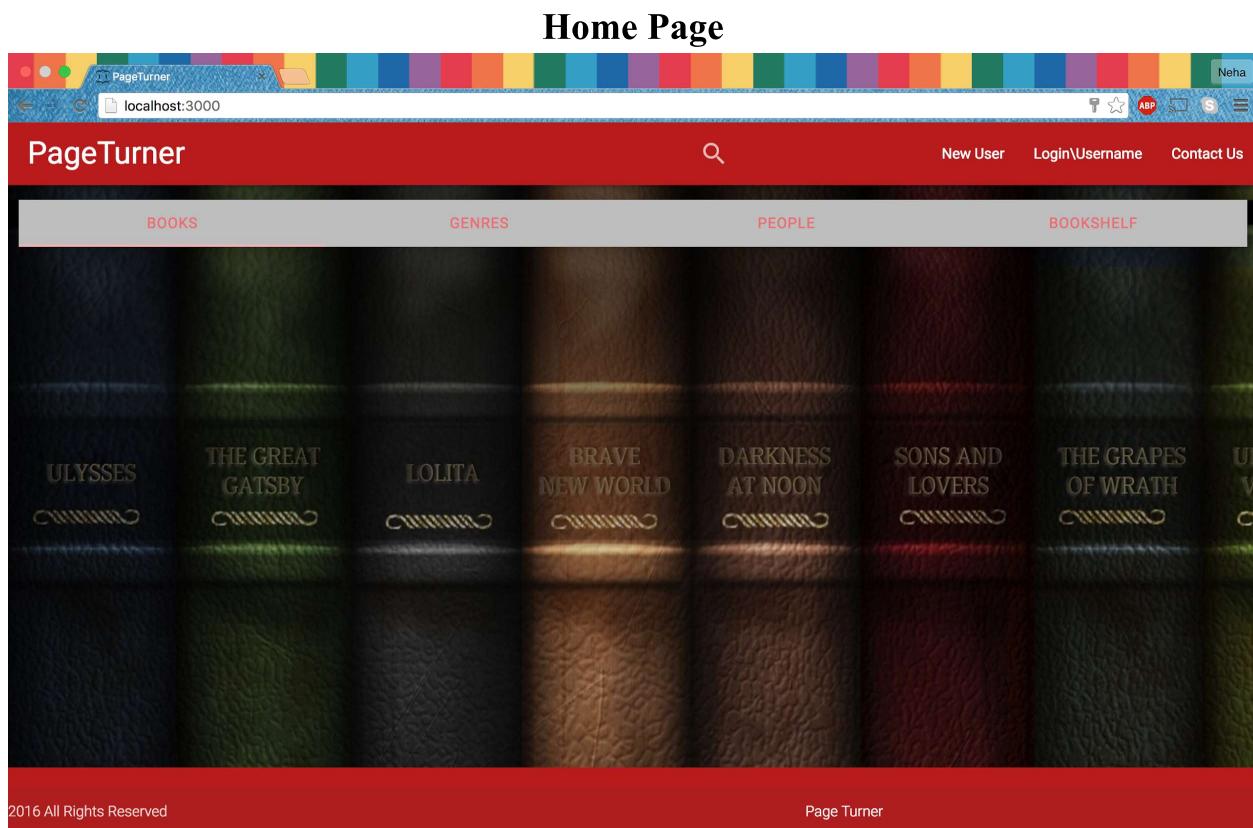
6. Installations

We need to do the following installation steps so that the application will run smoothly.

- We need to install node js by giving following command
 - npm install node.
- We need to install express by giving following command
 - npm install express.
- Need to install the body-parser package by using the following query
 - npm install body-parser
- Then run the server.js file in Project directory with the command ‘node server.js’
- User has to make his account first on the web page by filling out the registration form. Then user will be logged in to the account and search for books.
- User can search the books by using search textbox or by searching the books by genre. This book information is extracted from the Google books API.

- Every book tab contains Book title, description, rating, preview of the book, more information about the book. The more info tab redirects the user to a page where there is general information and reviews about the book posted on google website.
- User can add books to bookshelf to mark the books that they have read, are currently reading or the ones they wish to read.
- User can edit his profile, by clicking on profile page and editing fields like about me or favorite books.
- User can view all the users of the application and view their profile and favourite books, they can also follow these users and then view their bookshelves.

7. Screenshots



PageTurner

You can view books tab without login

The screenshot shows the PageTurner application interface. At the top, there is a colorful header bar followed by a navigation bar with the title "PageTurner", a search icon, and links for "New User", "Login\Username", and "Contact Us". Below the navigation bar is a menu bar with tabs: "BOOKS", "GENRES", "PEOPLE", and "BOOKSHELF". The "BOOKS" tab is active, displaying a list of book titles. The list includes:

- A Game of Thrones
- George R. R. Martin's Official A Game of Thrones Coloring Book
- A Game of Thrones
- Game of Thrones
- Game of Thrones and Philosophy
- A Feast of Ice and Fire: The Official Game of Thrones Companion Cookbook
- The World of Ice & Fire
- A Game of Thrones
- A Game of Thrones
- Game of Thrones 5-Copy Boxed Set
- A Game of Thrones
- George R. R. Martin's Official A Game of Thrones Coloring Book
- A Game of Thrones

The URL in the browser address bar is "localhost:3000/#test1".

You can view Genres tab without login

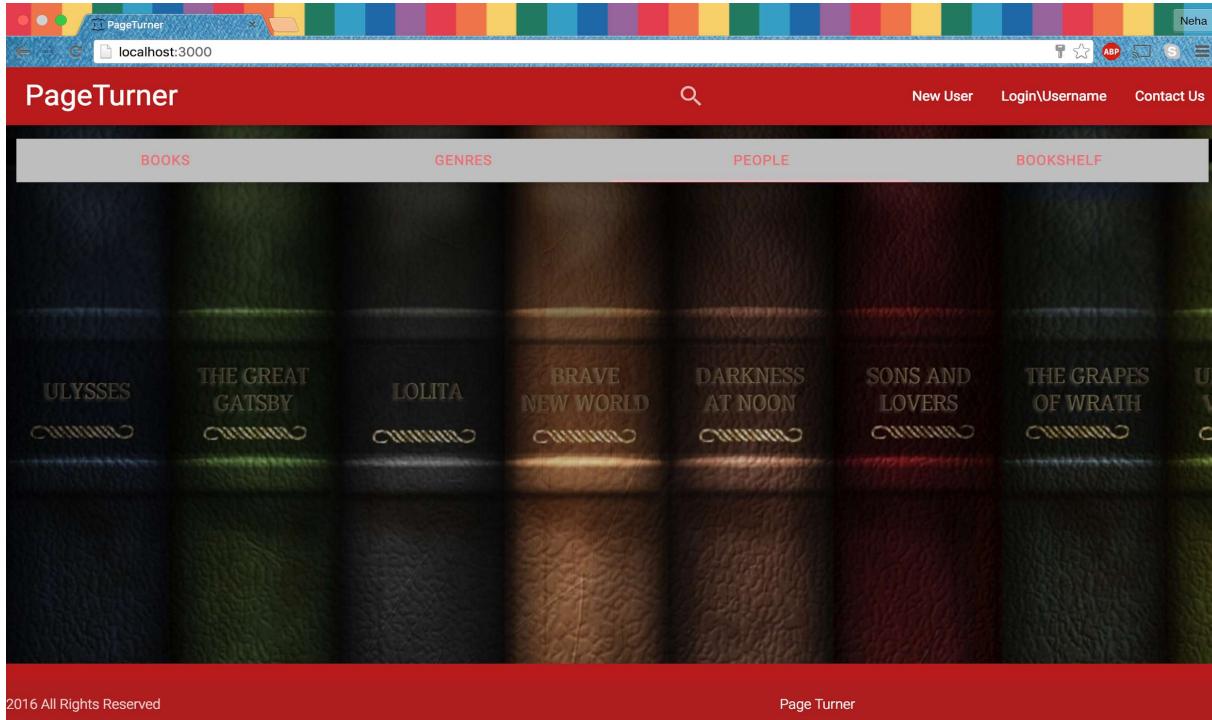
The screenshot shows the PageTurner application interface. At the top, there is a colorful header bar followed by a navigation bar with the title "PageTurner", a search icon, and links for "New User", "Login\Username", and "Contact Us". Below the navigation bar is a menu bar with tabs: "BOOKS", "GENRES", "PEOPLE", and "BOOKSHELF". The "GENRES" tab is active, displaying a list of genres with small icon icons next to them. The list includes:

Genre	Icon	Genre	Icon
Art	[Icon]	Classics	[Icon]
Biography	[Icon]	Contemporary	[Icon]
Business	[Icon]	Cookbooks	[Icon]
Christian	[Icon]	Crime	[Icon]
Ebooks	[Icon]	Horror	[Icon]
Fantasy	[Icon]	Manga	[Icon]
Fiction	[Icon]	Music	[Icon]
History	[Icon]	Mystery	[Icon]
Nonfiction	[Icon]	Paranormal	[Icon]
Poetry	[Icon]	Suspense	[Icon]
Religion	[Icon]	Sports	[Icon]
Romance	[Icon]	Spirituality	[Icon]
Science	[Icon]	Thriller	[Icon]

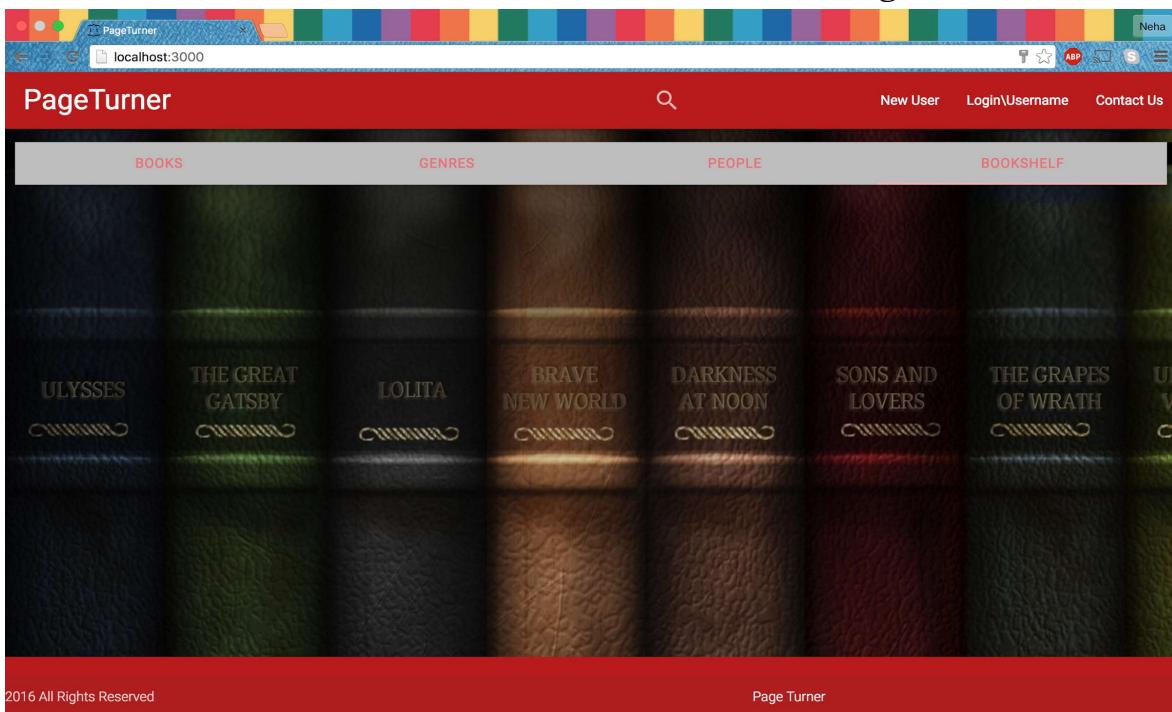
The URL in the browser address bar is "localhost:3000/#!".

PageTurner

You can't view Registered users in people tab without login



You can't create a bookshelf without login



PageTurner

Search books using keyword

The screenshot shows a web browser window for 'PageTurner' at 'localhost:3000'. The search bar contains the keyword 'mark'. Below the search bar, there are four navigation tabs: 'BOOKS', 'GENRES', 'PEOPLE', and 'BOOKSHELF'. The 'BOOKS' tab is selected. The main content area displays a list of book titles containing the keyword 'mark': 'The Gospel of Mark', 'Men of Mark in South Carolina', 'Mark', 'Mark: 8-16', 'Leave Your Mark', 'The Gospel of Mark', 'Mark', 'Mark for Everyone', 'On Your Mark', and 'Mark'. At the bottom of the page, there is a footer with the text '2016 All Rights Reserved' and 'Page Turner'.

If you click on a book you will get image, title, description and rating of the book

The screenshot shows the same 'PageTurner' application interface as the previous one, but now focusing on the book 'Leave Your Mark' by Aliza Licht. The book's cover is displayed on the left, showing the title 'LEAVE YOUR MARK' and the author's name 'ALIZA LICHT'. To the right of the cover, there is a detailed description of the book: 'LEAVE YOUR MARK isn't an advice book – it's a mentorship in 288 pages. Aliza Licht-global fashion communications executive, AKA fashion's favorite 'PR girl' and former Twitter phenomenon-is here to tell her story, complete with The Devil Wears Prada-like moments and insider secrets. Drawing invaluable lessons from her experience, Licht shares advice, inspiration, and a healthy dose of real talk in LEAVE YOUR MARK. She delivers personal and professional guidance for people just starting their careers and for people who are well on their way. With a particular emphasis on communicating and building your personal brand, something she knows a thing or two about, Aliza is your sassy, knowledgeable guide to the contemporary working world, where personal and professional lines are blurred and the most important thing you can have is a strong sense of self.' Below the description, it says 'Average Rating: 4'. At the bottom right, there is a green button labeled 'ADD TO BOOKSHELF'.

PageTurner

Registration form for new user(jpotter)

The screenshot shows a web browser window for the PageTurner application at localhost:3000. The title bar says "PageTurner". The main content area has a red header "New User?". Below it, a sub-header says "Create your unique username on PageTurner". There are four input fields: "First Name" (James), "Last Name" (Potter), "Email Id" (james_p@gmail.com), and "User Name" (jpotter). On the left sidebar, there's a "BOOKS" section with a list of book titles. On the right sidebar, there's a "BOOKSHELF" section showing a grid of book covers. At the bottom, there's a red footer bar with "2016 All Rights Reserved" and "Page Turner".

Continued ...

This screenshot shows the same registration form as the previous one, but with an additional "Password" field added below the other inputs. The "Password" field contains the value ".....". The rest of the form fields and sidebar sections are identical to the first screenshot.

PageTurner

After Login(jpotter)

A Game of Thrones
George R. R. Martin's Official A Game of Thrones Coloring Book
A Game of Thrones
Game of Thrones
Game of Thrones and Philosophy
A Feast of Ice and Fire: The Official Game of Thrones Companion Cookbook
The World of Ice & Fire
A Game of Thrones
A Game of Thrones
Game of Thrones 5-Copy Boxed Set

View Profile tab

A Game of Thrones
George R. R. Martin's Official A Game of Thrones Coloring Book
A Game of Thrones
Game of Thrones
Game of Thrones and Philosophy
A Feast of Ice and Fire: The Official Game of Thrones Companion Cookbook
The World of Ice & Fire
A Game of Thrones
A Game of Thrones
Game of Thrones 5-Copy Boxed Set

PageTurner

Profile Page(jpotter)

The screenshot shows a web browser window for the PageTurner application. The title bar says "PageTurner" and the address bar shows "localhost:3000/#!". The main content area has a red header with the text "PageTurner" and a search icon. Below the header is a "Profile" section with a yellow profile icon. The profile information is listed as follows:

First Name:	James	edit
Last Name:	Potter	edit
User Name:	jpotter	
Email:	james_p@gmail.com	
About me:	edit	
Favorite Books:	edit	
Bookshelf:		

At the bottom of the profile section are two buttons: "BACK" and "SAVE". The footer of the page contains the text "2016 All Rights Reserved" and "Page Turner".

Editing About me and Favorite Books fields

The screenshot shows the same web browser window as the previous one, but the "About me" and "Favorite Books" fields have been edited. The "About me" field now contains the text "I am a book fanatic." and the "Favorite Books" field contains "Harry potter, Deception point". The rest of the profile information remains the same as in the first screenshot.

PageTurner

After editing the fields

The screenshot shows a web browser window for 'PageTurner' at 'localhost:3000/?#'. The title bar has a colorful decorative bar. The header includes a search icon, a user profile for 'jpotter', and a 'Contact Us' link. Below the header is a red navigation bar with 'PageTurner' on the left and a magnifying glass icon on the right. The main content area is titled 'Profile' with a yellow circular icon containing a book. It displays the following user information:

First Name:	James	edit
Last Name:	Potter	edit
User Name:	jpotter	
Email:	james_p@gmail.com	
About me:	I am a book fanatic.	edit
Favorite Books:	Harry potter, Deception point	edit
Bookshelf:		

At the bottom are 'BACK' and 'SAVE' buttons. The footer is red with '2016 All Rights Reserved' and 'Page Turner'.

After clicking on Romance genre, and then a book

The screenshot shows a web browser window for 'PageTurner' at 'localhost:3000/?#'. The title bar has a colorful decorative bar. The header includes a user profile for 'Neha' on the right. Below the header is a red navigation bar with 'Romance', 'Science', 'Spirituality', 'Thriller', and other genre icons. The main content area shows a book detail page for 'Flatland a romance of many dimensions' by 'Paganism in Arthurian Romance'. The book cover image is visible on the left. To the right is a detailed description of the book:

Flatland a romance of many dimensions

Description:

Flatland a romance of many dimensions is a classic science fiction novel by Edwin Abbott Abbott. It is a satirical novella that explores the nature of perception, reality, and dimensionality through the eyes of a two-dimensional character named A. Square. The story follows A. Square's journey through various dimensions, from the simple geometric shapes of Flatland to the complex and mysterious world of Spaceland. The novel is a profound exploration of the limitations of our own perception and the ways in which we can expand our understanding of the world around us.

Summary:

The book begins with a preface by the author, Edwin Abbott Abbott, in which he explains the concept of the novel as a "romance of many dimensions". He goes on to describe the two-dimensional world of Flatland, where all objects are polygons, and the inhabitants are limited to two dimensions. The story then follows the protagonist, A. Square, as he travels through various dimensions, including Spaceland, where he meets higher-dimensional beings who challenge his assumptions about reality. The novel is a powerful exploration of the nature of perception, reality, and dimensionality, and it remains a classic work of science fiction to this day.

Average Rating: 3.5

[PREVIEW](#)

[More Info](#)

[ADD TO BOOKSHELF](#)

PageTurner

This is the book preview link for the above book

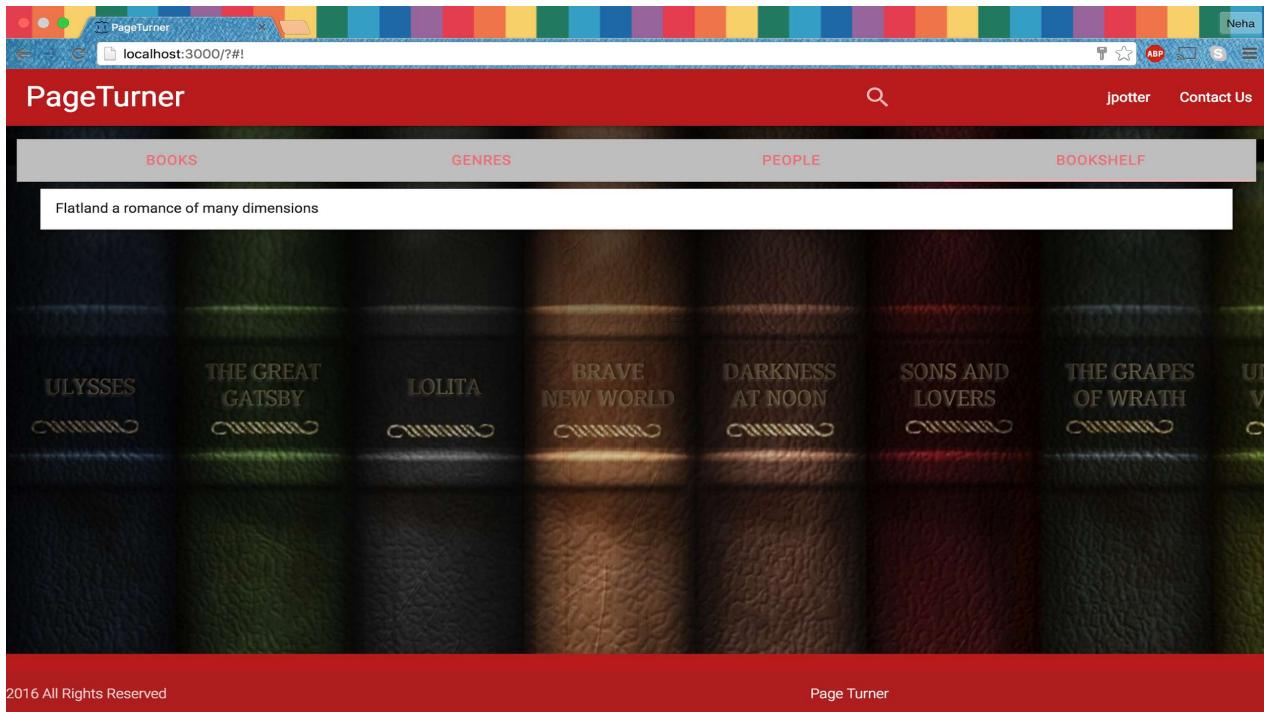
The screenshot shows a Google Books search result for the query "romance". The results page lists "Result 1 of 100 in this book for romance". The first result is "Flatland a romance of many dimensions" by A Square. The preview shows the first 12 pages of the book, which are numbered 5 through 12. The pages contain text such as "Of our Methods of Recognizing one another.", "Of Recognition by Sight", "Concerning Irregular Figures", etc.

This is the book info link for the above book

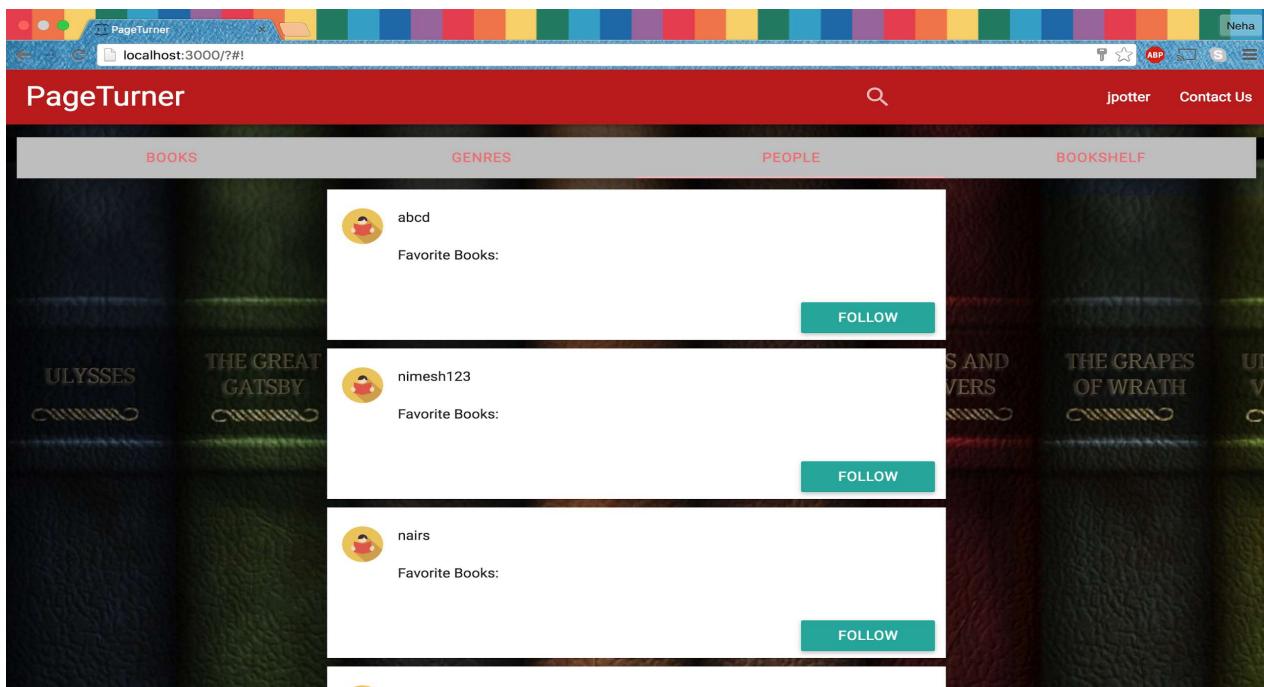
The screenshot shows the detailed information page for "Flatland a romance of many dimensions" by A Square. The page includes the book cover, author information (A Square, 1899), user reviews (28 reviews, average 4.1 stars), and a "Search inside" button. Below the reviews, there is a section titled "What people are saying - Write a review" with two user reviews. To the right, there is a "User ratings" chart showing the distribution of star ratings: 5 stars (10), 4 stars (9), 3 stars (5), 2 stars (3), and 1 star (1). The page also features a "Related books" section.

PageTurner

When the above book is added to the bookshelf, you can view it in Bookshelf tab

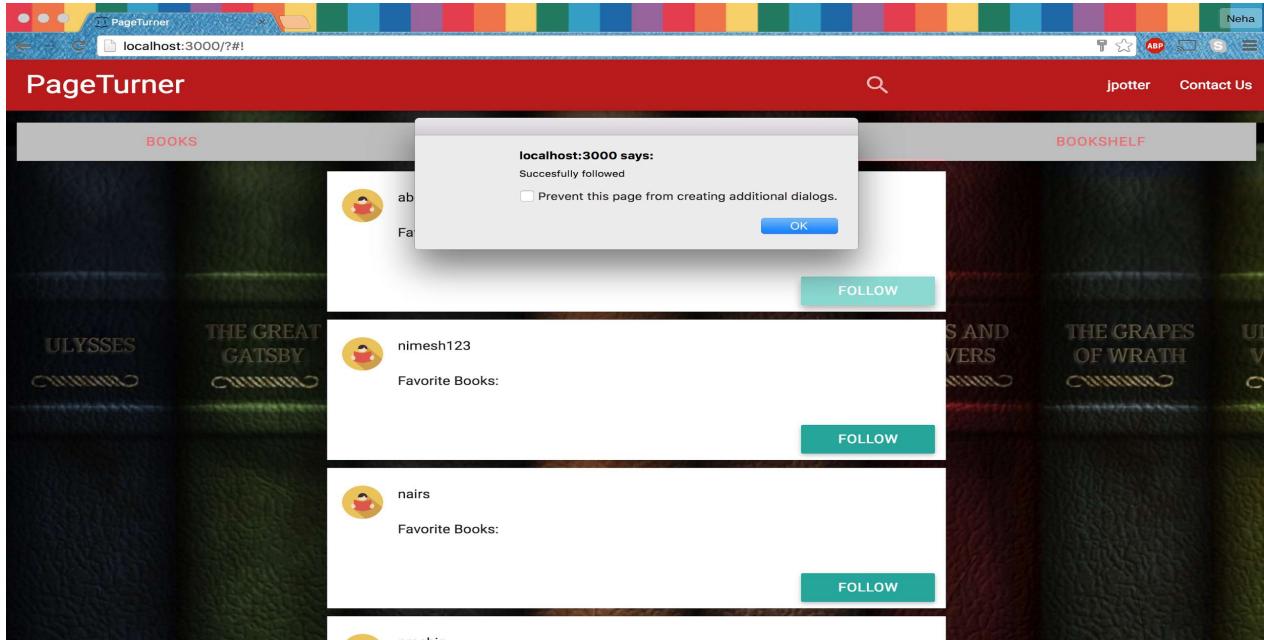


You can view all the users in people tab

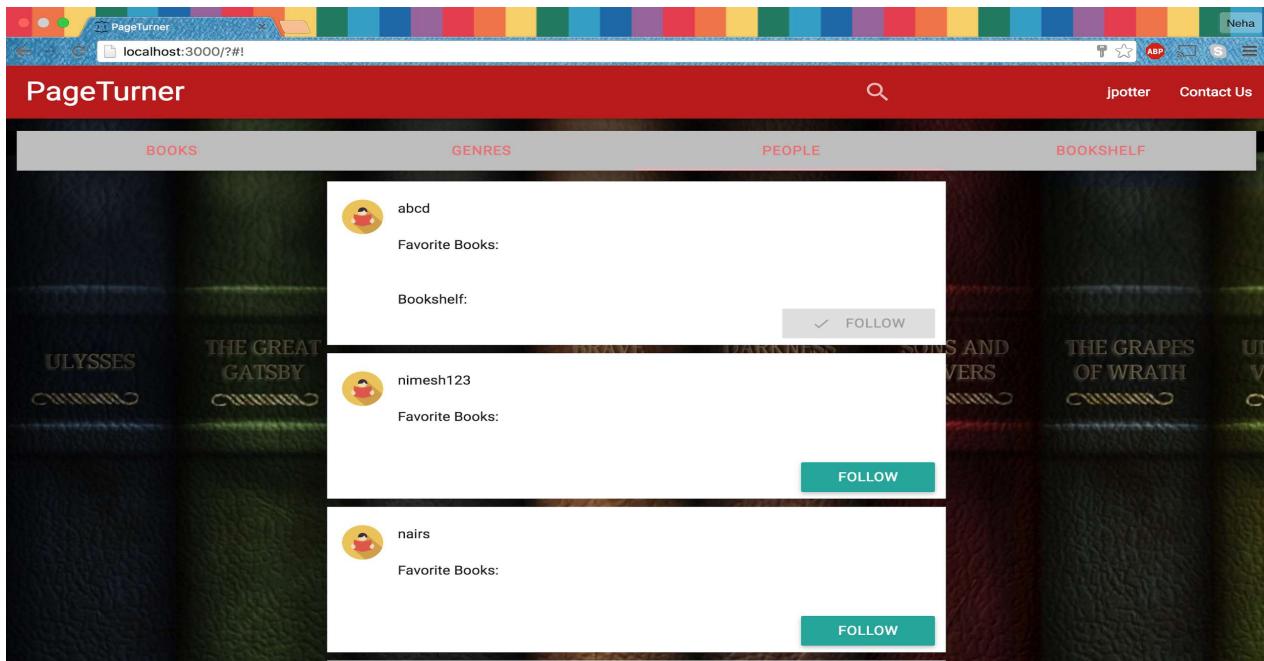


PageTurner

User jpotter followed user abcd



Now he (jpotter) can see abcd's bookshelf(which is empty currently) as well



PageTurner

Now let's add some books to bookshelf in abcd's account

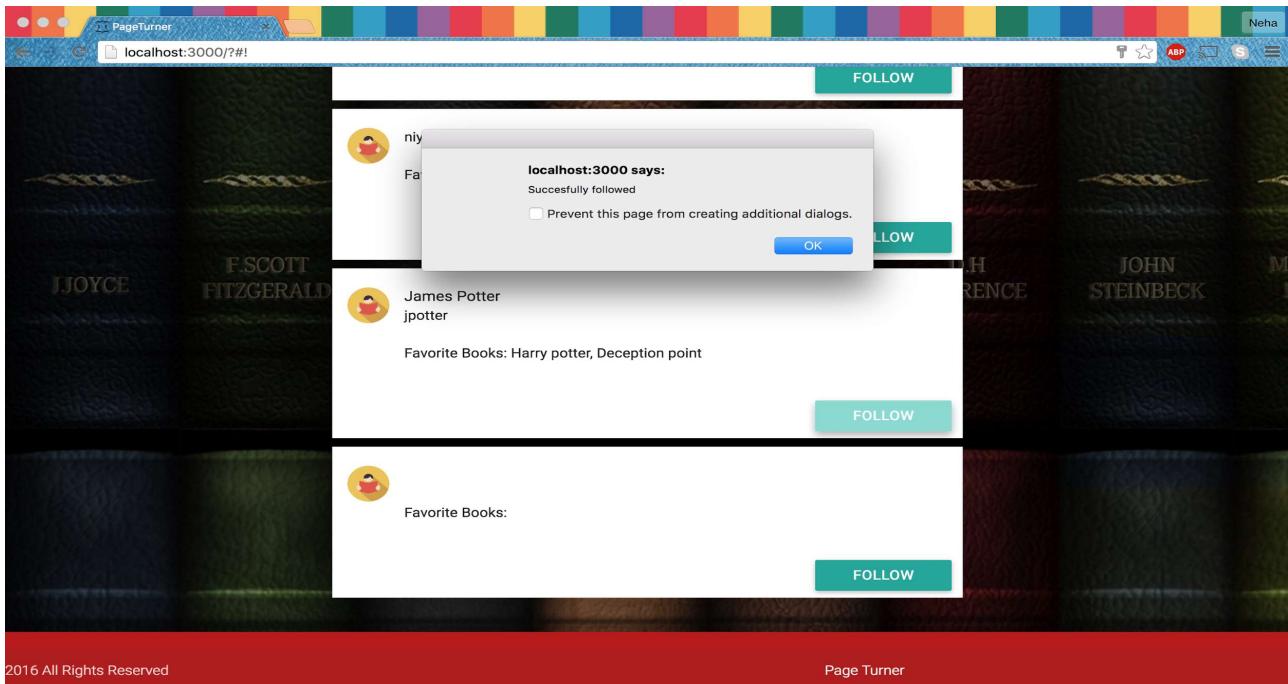
The screenshot shows the PageTurner application interface. At the top, there is a navigation bar with tabs for 'BOOKS', 'GENRES', 'PEOPLE', and 'BOOKSHELF'. The 'BOOKSHELF' tab is currently active. Below the navigation bar, there is a search bar and a user profile section for 'abcd' and 'Neha'. A list of books is displayed, including 'A Game of Thrones' and 'The 13th Hour'. The main area features a large image of a bookshelf with several books visible, including 'ULYSSES', 'THE GREAT GATSBY', 'LOLITA', 'BRAVE NEW WORLD', 'DARKNESS AT NOON', 'SONS AND LOVERS', and 'THE GRAPES OF WRATH'. At the bottom of the page, there is a footer with the text '2016 All Rights Reserved' and 'Page Turner'.

user abcd is now not following anyone

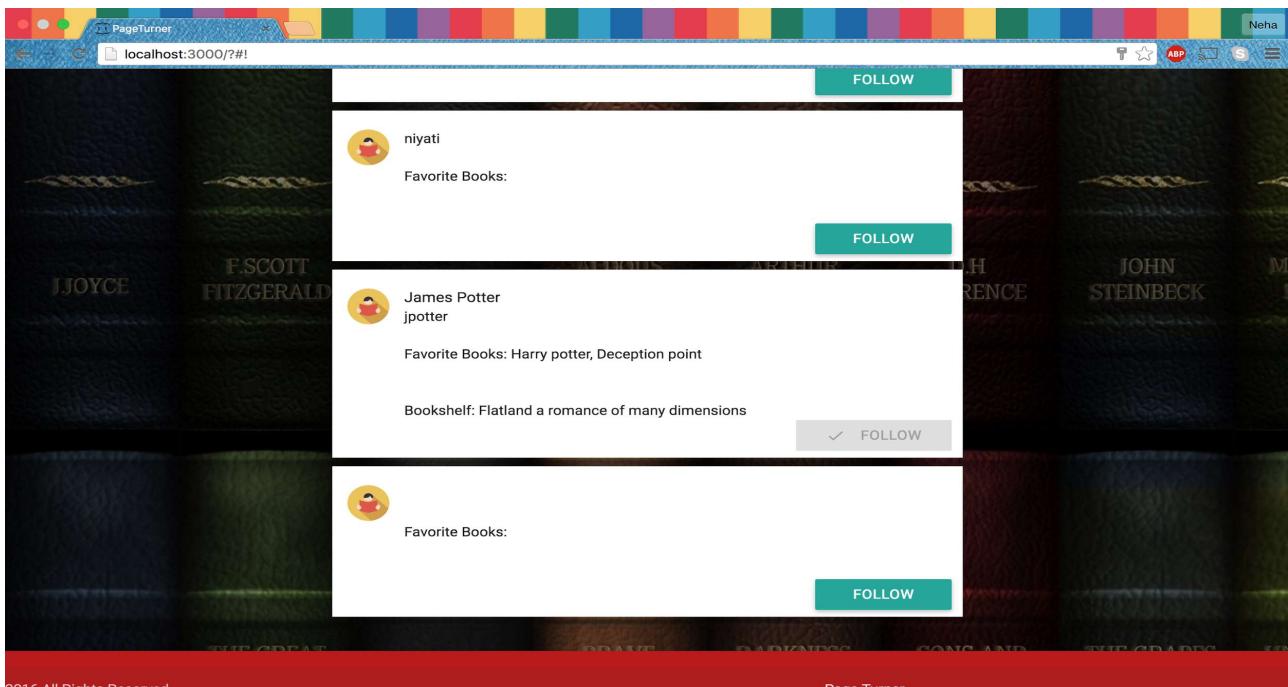
The screenshot shows the PageTurner application interface. The user 'abcd' is viewing the profiles of other users. The first profile is for 'niyati', who has a yellow icon with a red book. The second profile is for 'James Potter' (jpotter), who also has a yellow icon with a red book. Both profiles show a 'FOLLOW' button. The background features a bookshelf with books by J.JOYCE, F. SCOTT FITZGERALD, H. RENFRE, and JOHN STEINBECK. At the bottom of the page, there is a footer with the text '2016 All Rights Reserved' and 'Page Turner'.

PageTurner

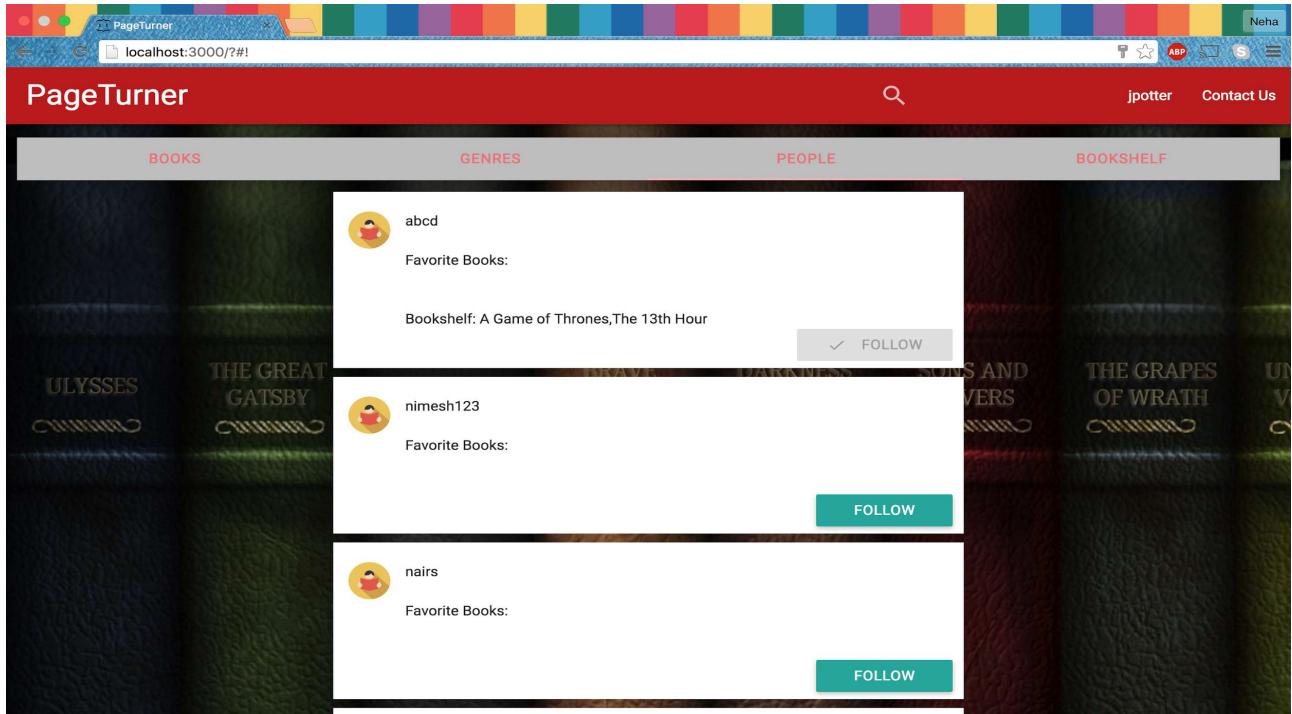
user abcd now followed user James potter



Now user abcd can view James potter's Bookshelf



Now if you go back to jpotter's account you can see abcd's bookshelf which was previously empty. Once you follow someone the follow button is disabled



8. References:

Goodreads.com

Lithub.com