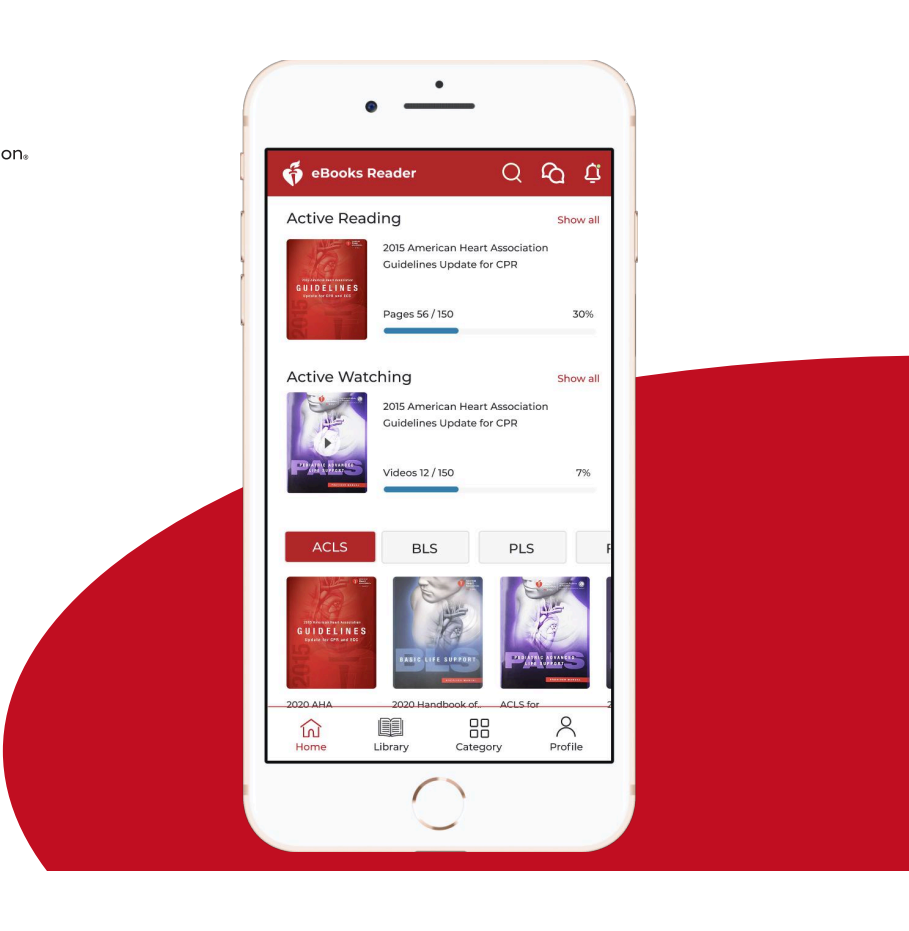
American Heart Association.
eBooks

UX Case Study

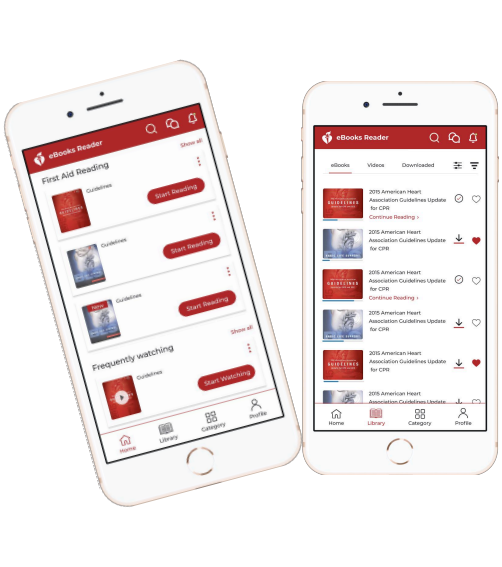
eBooks Reader App


eBooks Reader
Active Reading
Show all
2015 American Heart Association Guidelines Update for CPR
Pages 56 / 150
30%
Active Watching
Show all
2015 American Heart Association Guidelines Update for CPR
Videos 12 / 150
7%
ACLS
BLS
PLS
2020 AHA
2020 Handbook of...
ACLS for
Home
Library
Category
Profile

Tools used

400+ Screens

Project Overview



American Heart Association (AHA) eBooks allow users to read publications on personal computers and mobile devices. Users can read eBooks online or download them for offline reading. When you purchase an eBook or redeem an access code, you are obtaining the right to read the content online as well as download it to your own device to be accessed offline. These rights are subject to technology conditions and limitations as well contractual agreements between the AHA and its vendors.

Problem Statement

- There is no data without login-we should not have an empty page. Sometimes it is good if we give a paragraph for free and ask them to login to continue reading.
- Language selector is necessary as users can see Chinese books on top of the discover list
- The third thumbnail seems to be a horizontal scroll, instead taking the user to the next tab (horizontal scroll is only on the titles. It Should be on thumbnails too)
- In Filters-Categories should be open
- According to the app download details, the language should be pre-selected
- Users do not need confirmation for language selection
- No pagination

Possible Solution

- Introduce Download, Download All
- Need the 'continue reading' for the user
- Image and content to be segregated
- Series of video downloading-queue up
- Algorithm (flowchart) can be zoomed but when you scroll left and right, it should still navigate within the flowchart but currently is skipping to the next image. Re-think representing flowchart itself
- Content representation in numbers is more easily accessible especially when we expect a user to follow any medical steps
- This application should be quick accessed
- Bookmarks, highlights

Targeted Users

- Healthcare professionals
- B2C Customer
- Anyone from anywhere
- Sales persons
- AHA Admin
- Non healthcare profesionals

My Role

Design Strategy
Problem Solution
Information Architecture
Empathy Mapping
Usability testing
User Flow
Prototyping
Visual Design
Wireframes
User Research
User Persona

Design Process

Empathize	Define	Ideate	Design	Test
Research Survey	User Persona Empathy Map User Journey	Information Architecture User Flow	Wireframes Visual Design Prototype	Usability Check Improvements

Design Process is a human-centered and iterative approach to problem-solving and innovation. It places a strong emphasis on empathy for the end-users, creative problem-solving, and prototyping, with the ultimate goal of creating solutions that deeply resonate with users' needs and preferences.

Pre-Development Process

- Requirement Gathering
- Documentation
- UX/UI, Review.

Requirement Types: Product, User, Business, and Technical requirements.

Documentation: Intro and Goal, who is it for? Initial UX Requirements, UX Team Details, and Overall Project UX Scope.

UX/UI Process: Empathize/Understand, define, Ideate, Design/Prototype, and Review.

UX Review Process: Peer/Manager review, Tech-feasibility, Internal Team, Client Side UX, Business, and UX review after implementation.

UX Deliverables: Static Frame, Interactive Prototype, Flowchart or Activity Diagram, User-Journey Map, Personas, High-Fidelity Mockup, and Site Map.

Development Stage

- Work with the dev to ensure the accuracy of the design, content alignment and components are accessibility compliance.
- Support the dev team for AUI component integration and Work with QA.

Post Development Stage

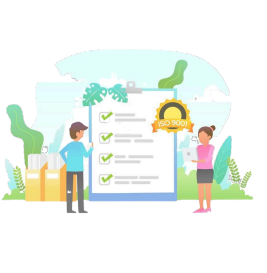
- Test the solution through AB testing, usability testing, or against measures
- Test Accessibility compliance
- Compare the high-fidelity mockups and HTML view to test the accuracy of implementation
- UX reviews should be done before moving to QA

Pre Development Process
Development Stage
Post Development Process

Users Research

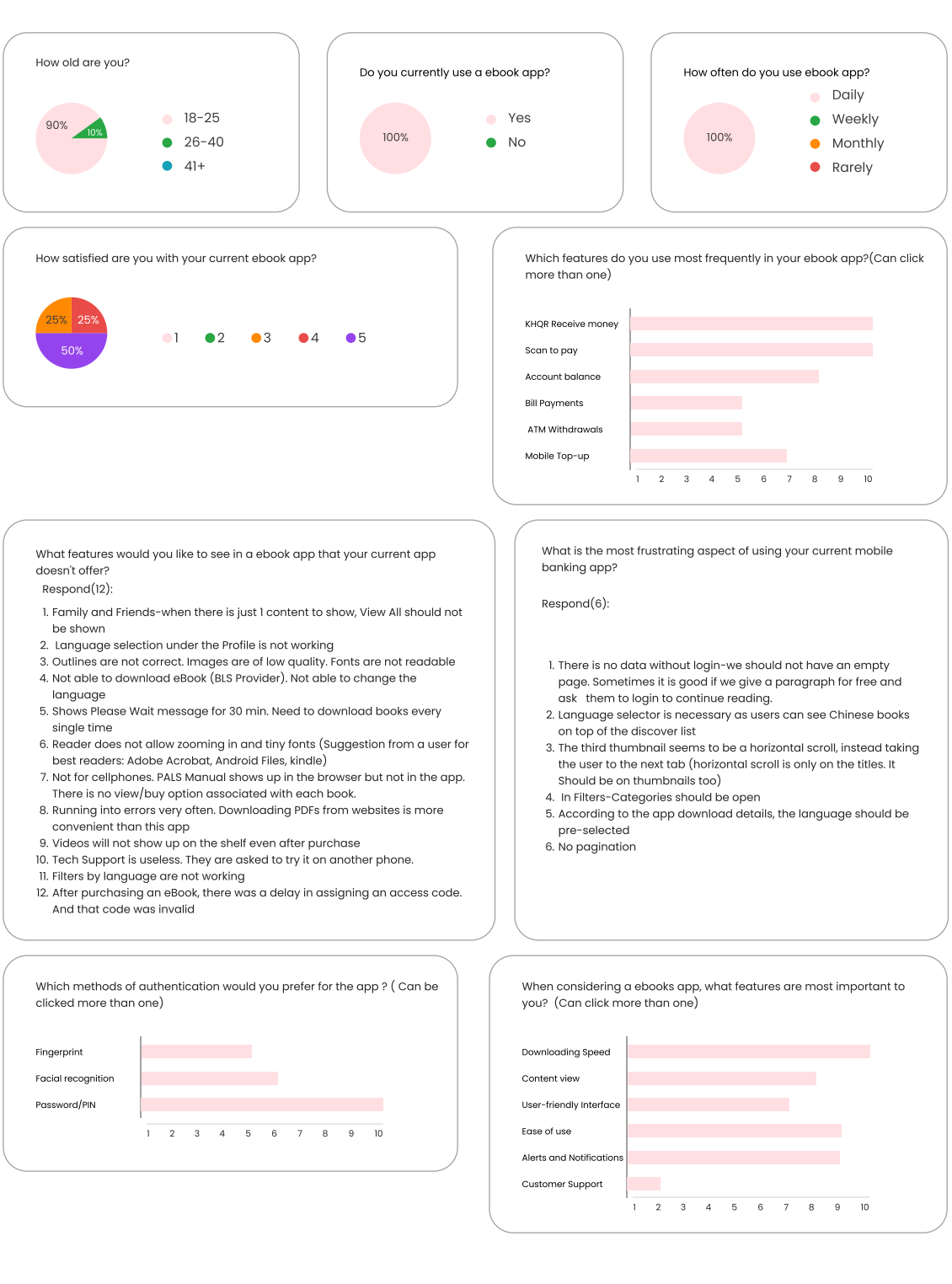
To gain in-depth insights into user needs, pain points, behaviors, and challenges, I conducted a user-centered design process. This will involve surveys with open-ended questions for 5 participants and interviews with 5 participants. The feedback gathered are used to improve the product's user-friendliness.

Survey Questions



1. How old are you?
2. Do you currently use a ebook app?
3. How often do you use ebook app?
4. How satisfied are you with your current ebook app?
5. Which features do you use most frequently in your ebook app?
6. What features would you like to see in a ebook app that your current app lacks?
7. What is the most frustrating aspect of using your current ebook app?
8. When considering a ebook app, what features are most important to you?
9. How often do you log out of your account when using the ebook app?

Survey & Interviews Results



What features would you like to see in a ebook app that your current app doesn't offer?

Respond(12):

1. Family and Friends-when there is just 1 content to show, View All should not be shown
2. Language selection under the Profile is not working
3. Outlines are not correct. Images are of low quality. Fonts are not readable
4. Not able to download eBook (BLS Provider). Not able to change the language
5. Shows Please Wait message for 30 min. Need to download books every single time
6. Reader does not allow zooming in and tiny fonts (Suggestion from a user for best readers: Adobe Acrobat, Android Files, kindle)
7. Not for cellphones. PALS Manual shows up in the browser but not in the app. There is no view/buy option associated with each book.
8. Running into errors very often. Downloading PDFs from websites is more convenient than this app
9. Videos will not show up on the shelf even after purchase
10. Tech Support is useless. They are asked to try it on another phone.
11. Filters by language are not working
12. After purchasing an eBook, there was a delay in assigning an access code. And that code was invalid

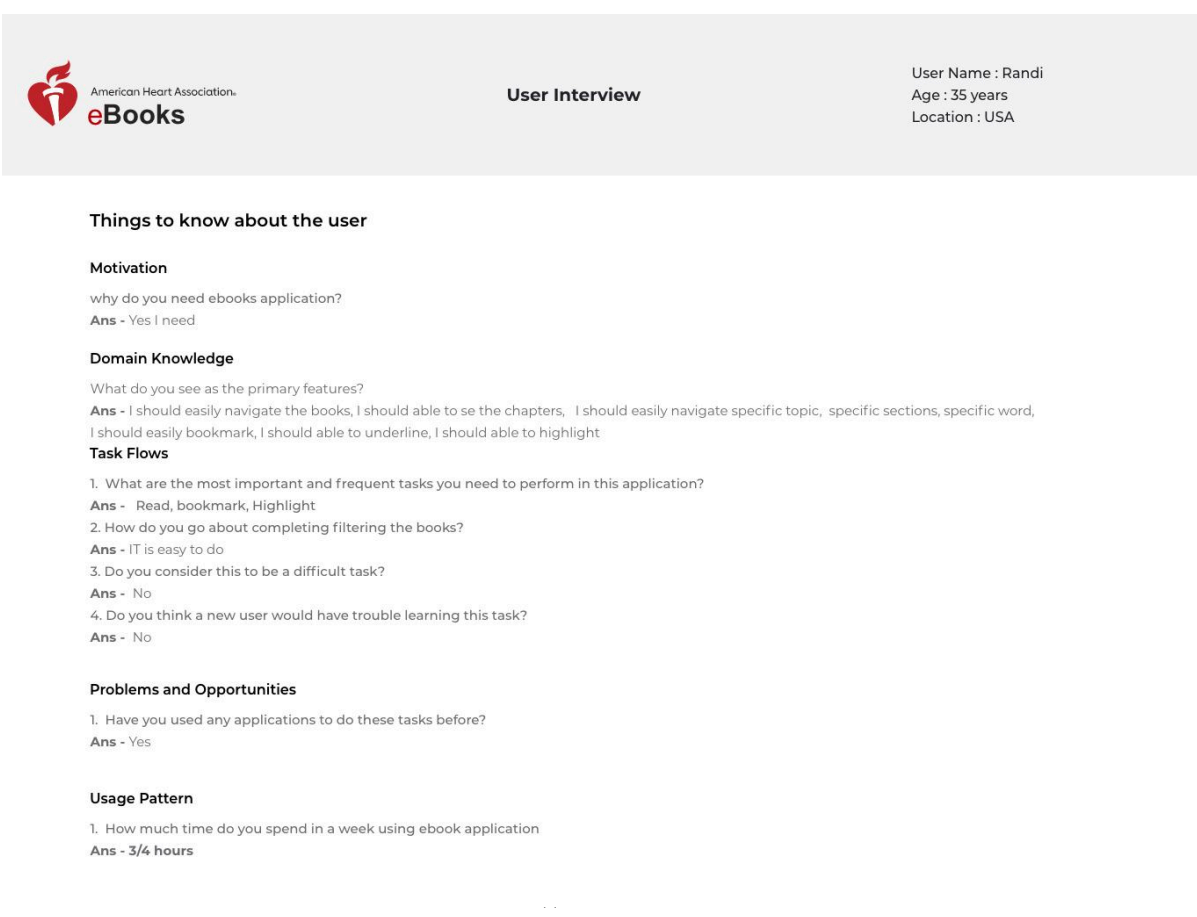
What is the most frustrating aspect of using your current mobile banking app?

Respond(6):

1. There is no data without login-we should not have an empty page. Sometimes it is good if we give a paragraph for free and ask them to login to continue reading.
2. Language selector is necessary as users can see Chinese books on top of the discover list
3. The third thumbnail seems to be a horizontal scroll, instead taking the user to the next tab (horizontal scroll is only on the titles. It Should be on thumbnails too)
4. In Filters-Categories should be open
5. According to the app download details, the language should be pre-selected
6. No pagination

User Interview

With the data collected from the survey and interview, I create a persona representing an ideal for the application. The persona helped me arrive at better solutions as it give an in-depth understanding of the users goals and frustrations and the overall personality.



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eBooks

User Interview

User Name : Randi
Age : 35 years
Location : USA

Things to know about the user

Motivation

why do you need ebooks application?
Ans - Yes I need

Domain Knowledge

What do you see as the primary features?
Ans - I should easily navigate the books, I should able to se the chapters, I should easily navigate specific topic, specific sections, specific word, I should easily bookmark, I should able to underline, I should able to highlight

Task Flows

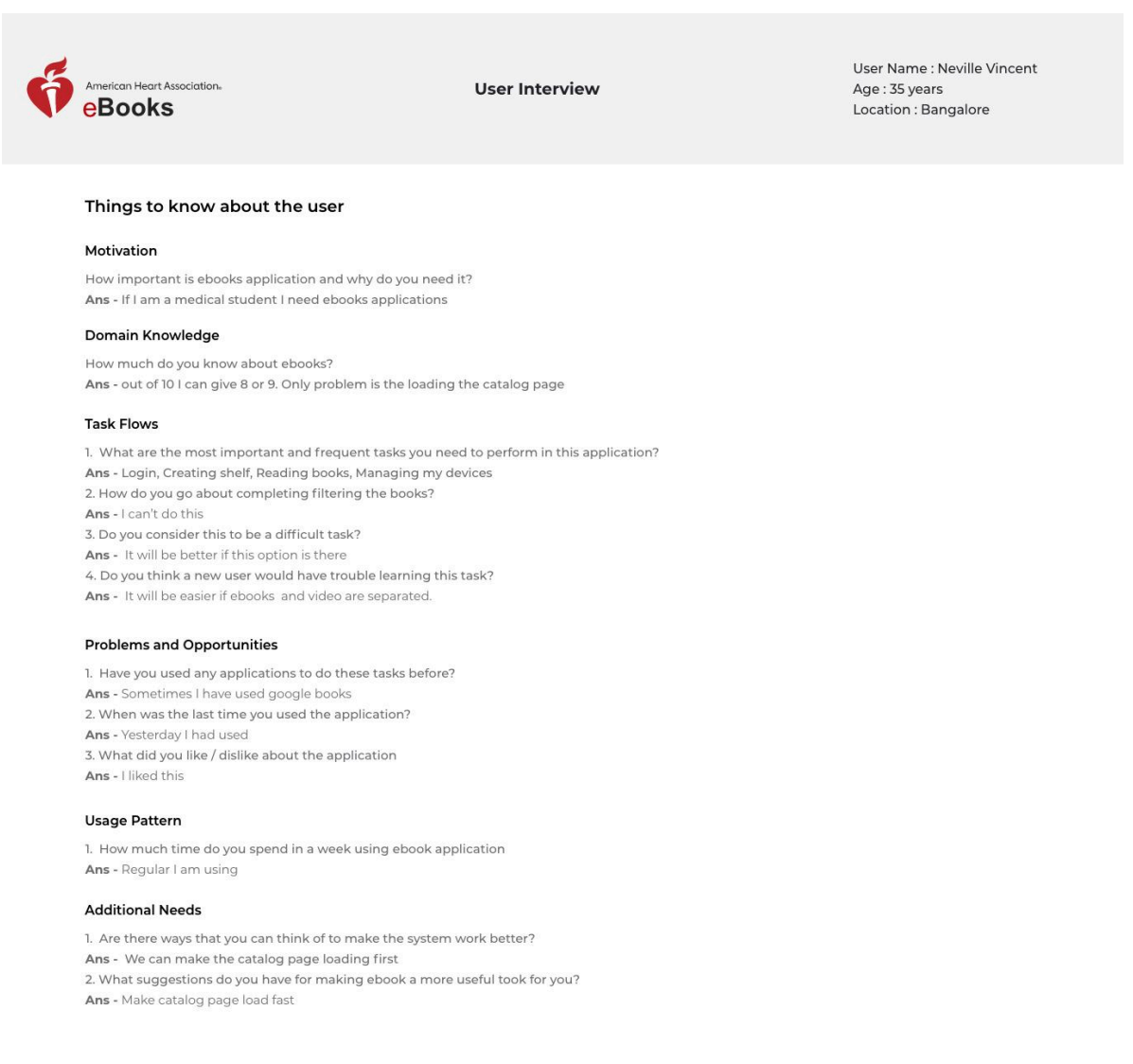
1. What are the most important and frequent tasks you need to perform in this application?
Ans - Read, bookmark, Highlight
2. How do you go about completing filtering the books?
Ans - IT is easy to do
3. Do you consider this to be a difficult task?
Ans - No
4. Do you think a new user would have trouble learning this task?
Ans - No

Problems and Opportunities

1. Have you used any applications to do these tasks before?
Ans - Yes

Usage Pattern

1. How much time do you spend in a week using ebook application
Ans - 3/4 hours



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eBooks

User Interview

User Name : Neville Vincent
Age : 35 years
Location : Bangalore

Things to know about the user

Motivation

How important is ebooks application and why do you need it?
Ans - If I am a medical student I need ebooks applications

Domain Knowledge

How much do you know about ebooks?
Ans - out of 10 I can give 8 or 9. Only problem is the loading the catalog page

Task Flows

1. What are the most important and frequent tasks you need to perform in this application?
Ans - Login, Creating shelf, Reading books, Managing my devices
2. How do you go about completing filtering the books?
Ans - I can't do this
3. Do you consider this to be a difficult task?
Ans - It will be better if this option is there
4. Do you think a new user would have trouble learning this task?
Ans - It will be easier if ebooks and video are separated.

Problems and Opportunities

1. Have you used any applications to do these tasks before?
Ans - Sometimes I have used google books
2. When was the last time you used the application?
Ans - Yesterday I had used
3. What did you like / dislike about the application
Ans - I liked this

Usage Pattern

1. How much time do you spend in a week using ebook application
Ans - Regular I am using

Additional Needs

1. Are there ways that you can think of to make the system work better?
Ans - We can make the catalog page loading first
2. What suggestions do you have for making ebook a more useful took for you?
Ans - Make catalog page load fast

Design Strategy

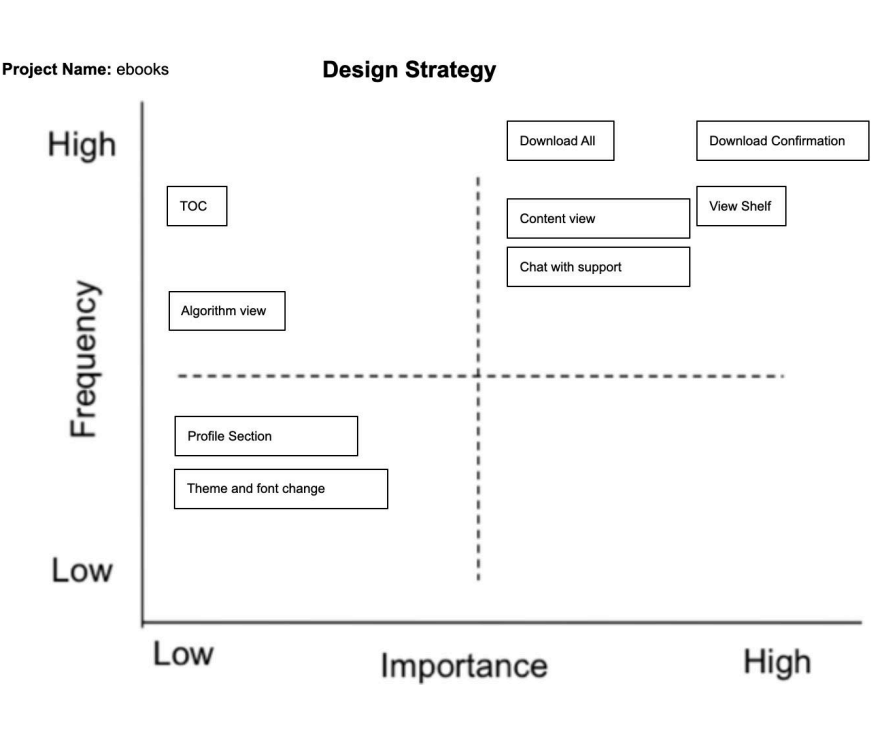
Project Name: ebooks

Executive Intent	American Heart Association (AHA) eBooks allow users to read publications on personal computers and mobile devices. Users can read eBooks online or download them for offline reading
Market Segment	• Healthcare professionals • AHA Admin • Non healthcare profesionals
General Tasks	1. Registration 2. Introduce Download, Download All 3. Need the 'continue reading' for the user 4. Algorithm (flowchart) can be zoomed but when you scroll left and right, it should still navigate within the flowchart but currently is skipping to the next image. Re-think representing flowchart itself
Technology (or other) Constraints	Device (Mobile, Desktop,Tablets)
Marketing / Branding Goals	• Get maximum registration • Community building
Critical Success Factors (Usability Criteria will come later)	CSF- Proper Algorithm and image preview **Usability criteria-** 1. Effectiveness (Read the content better user experience) 2. Efficiency (registration process completed within 5 minutes) 3. Error handling/ prevention (Reading view in better Usability)

Project Name: ebooks

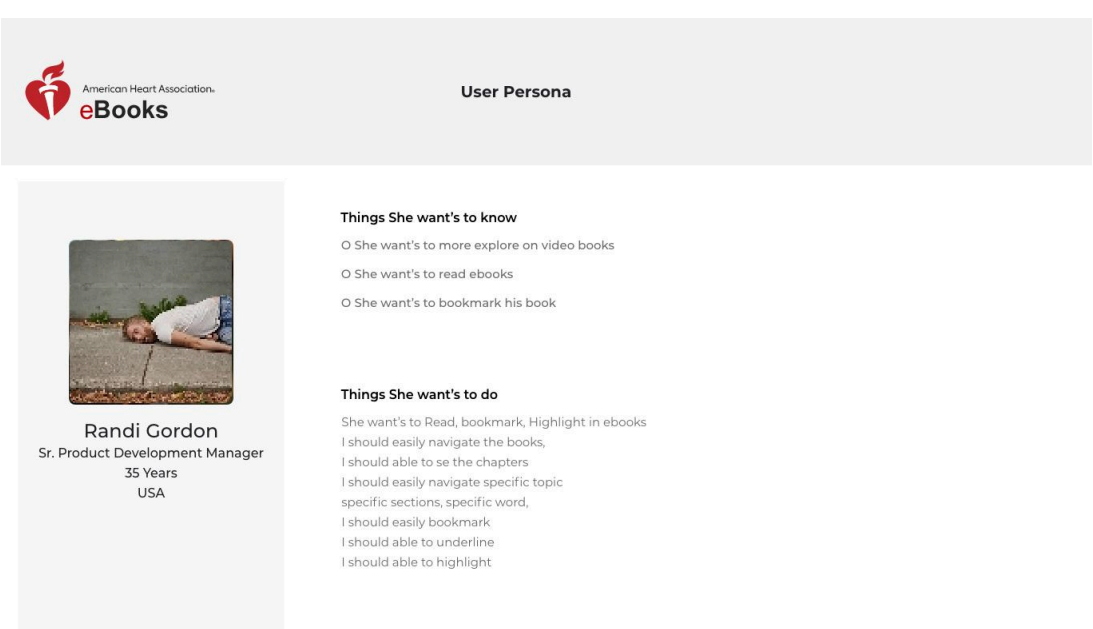
Characteristic	**Market Segments**	
	Healthcare professionals (primary)	**Non healthcare profesionals (secondary)**
Language	English, Native language	English, Native language
General Education	N/A	N/A
~~Domain Expertise~~	Medium-High	Low-Medium
General Computer Experience	Low- Medium- High	Low-Medium-High
Age / Gender	• **Target age group Youth (18-60 yrs)** • Age (all ages), • Gender (all genders)	• **Target age group Youth (18-80 yrs)** • Age (all ages), • Gender (all genders)
Expectations	Easy to use app, Fast registration, better content view	Easy to use app, Fast registration, better content view

Project Name: ebooks



User Persona

With the data collected from the survey and interview, I create a persona representing an ideal for the application. The persona helped me arrive at better solutions as it give an in-depth understanding of the users goals and frustrations and the overall personality.



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User Persona

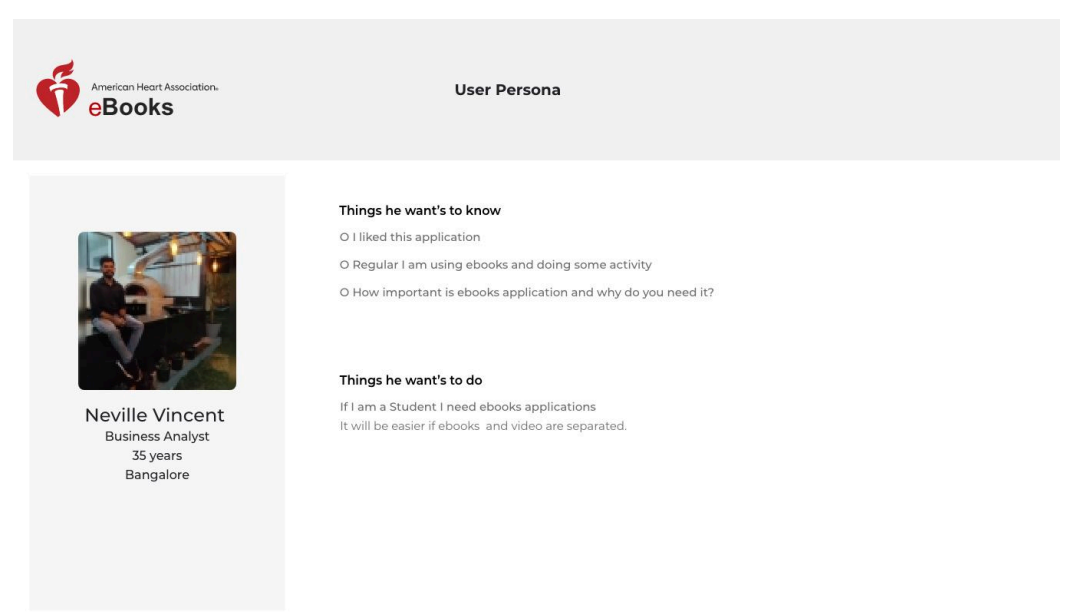
Randi Gordon
Sr. Product Development Manager
35 Years
USA

Things She want's to know

- She want's to more explore on video books
- She want's to read ebooks
- She want's to bookmark his book

Things She want's to do

She want's to Read, bookmark, Highlight in ebooks
I should easily navigate the books,
I should able to se the chapters,
I should easily navigate specific topic
specific sections, specific word,
I should easily bookmark
I should able to underline
I should able to highlight



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eBooks

User Persona

Neville Vincent
Business Analyst
35 years
Bangalore

Things he want's to know

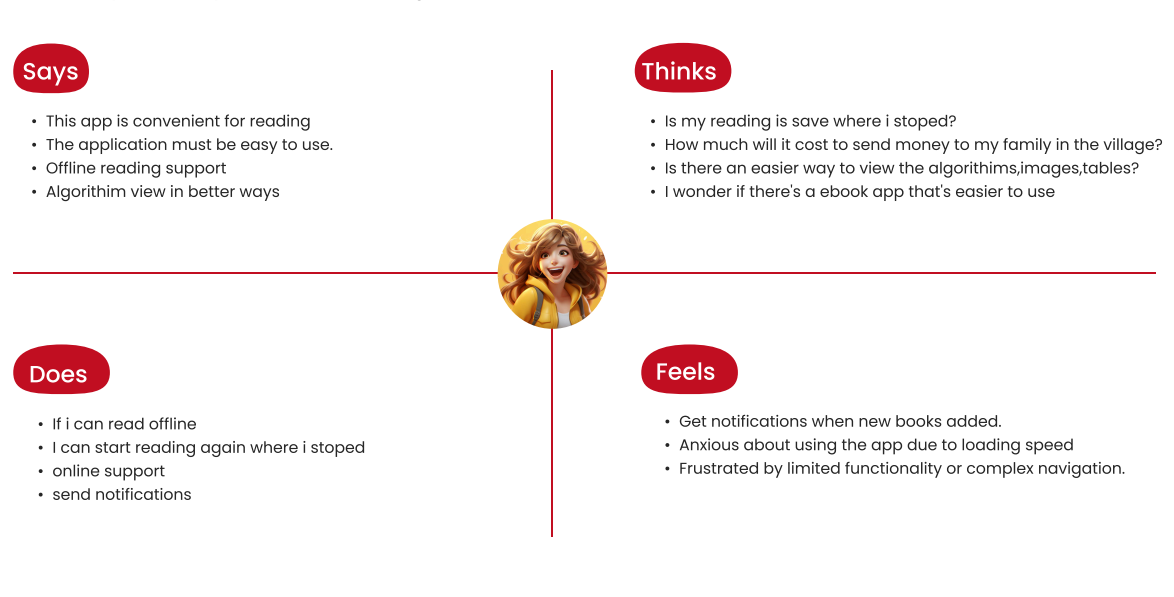
- I liked this application
- Regular I am using ebooks and doing some activity
- How important is ebooks application and why do you need it?

Things he want's to do

If I am a Student I need ebooks applications
It will be easier if ebooks and video are separated.

Empathy Map

The process was done to define the target audience with more clarity, as well as illustrate their needs and actions. Empathy mapping helped me gain perspective one their thoughts and feelings. The data in the empathy map are based on insights from user interviews and surveys.



Says

- This app is convenient for reading
- The application must be easy to use.
- Offline reading support
- Algorithim view in better ways

Thinks

- Is my reading is save where i stoped?
- How much will it cost to send money to my family in the village?
- Is there an easier way to view the algorithims,images,tables?
- I wonder if there's a ebook app that's easier to use

Does

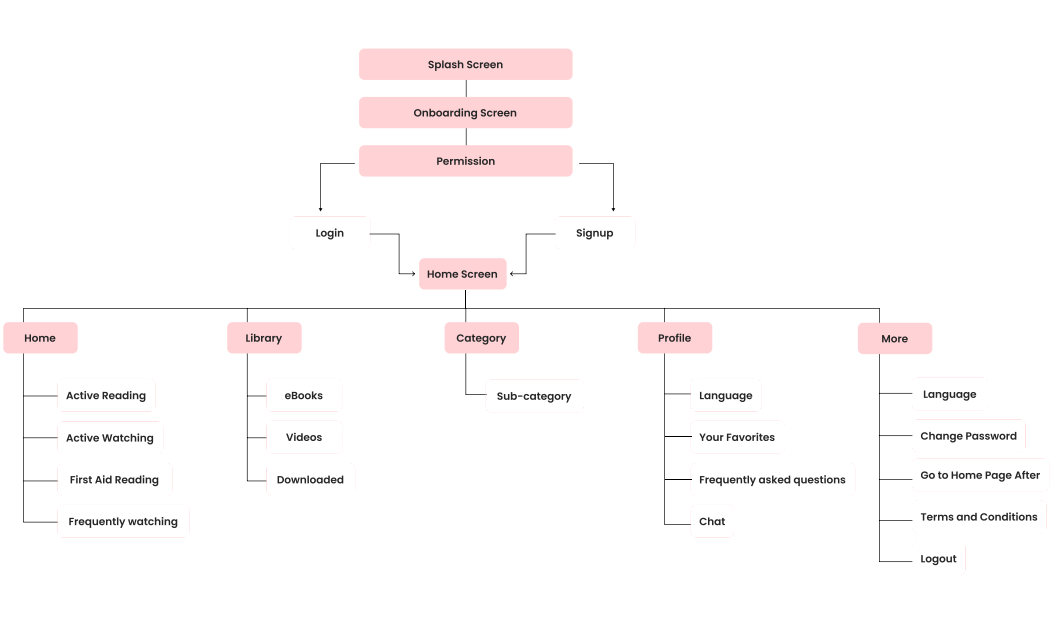
- If i can read offline
- I can start reading again where i stoped
- online support
- send notifications

Feels

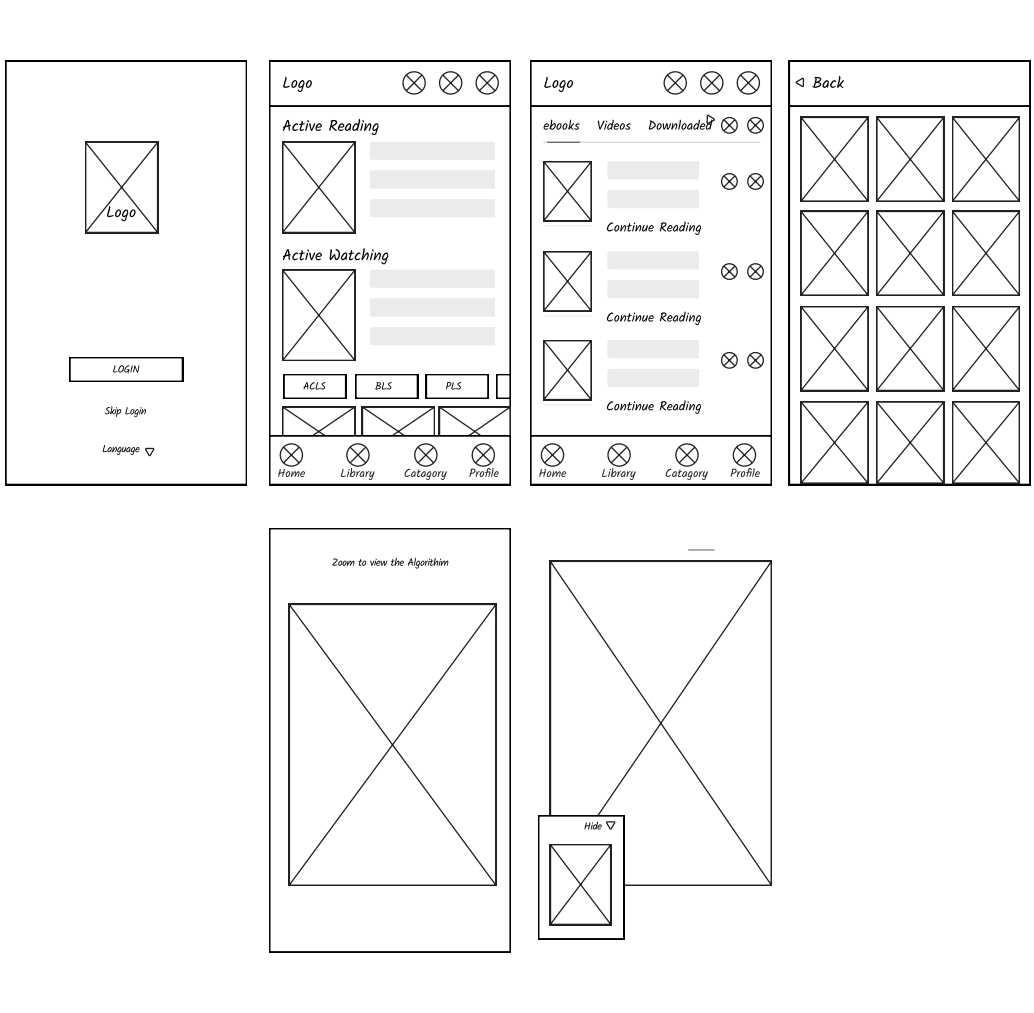
- Get notifications when new books added.
- Anxious about using the app due to loading speed
- Frustrated by limited functionality or complex navigation.

Information Architecture

Information architecture is aimed at organizing, structuring, and labeling content in an effective and sustainable way. The goal is to help users find information and complete the tasks.


Splash Screen
Onboarding Screen
Permission
Login
Signup
Home Screen
Home
Active Reading
Active Watching
First Aid Reading
Frequently watching
Library
eBooks
Videos
Downloaded
Category
Sub-category
Profile
Language
Your Favorites
Frequently asked questions
Chat
More
Language
Change Password
Go to Home Page After
Terms and Conditions
Logout

Wireframe


Logo
LOGIN
Skip Login
Language
Logo
Active Reading
Active Watching
ACLS
BLS
PLS
Home
Library
Category
Profile
Logo
ebooks
Videos
Downloaded
Continue Reading
Continue Reading
Continue Reading
Back
Zoom to view the Algorithm
Hide

Accessibility

Accessibility ensures that users of all abilities, including those with visual, auditory, cognitive, motor, and speech disabilities, can use your product without barriers.

Perceivable – Users must be able to perceive the information (text, images, videos).

- Add alt text for images
- Ensure color contrast is sufficient
- Use captions and transcripts for videos

Operable – Users must be able to navigate and use all components.

- Make everything keyboard accessible
- Avoid content that flashes (seizure risks)
- Use clear focus indicators

Understandable – Content must be easy to read and intuitive.

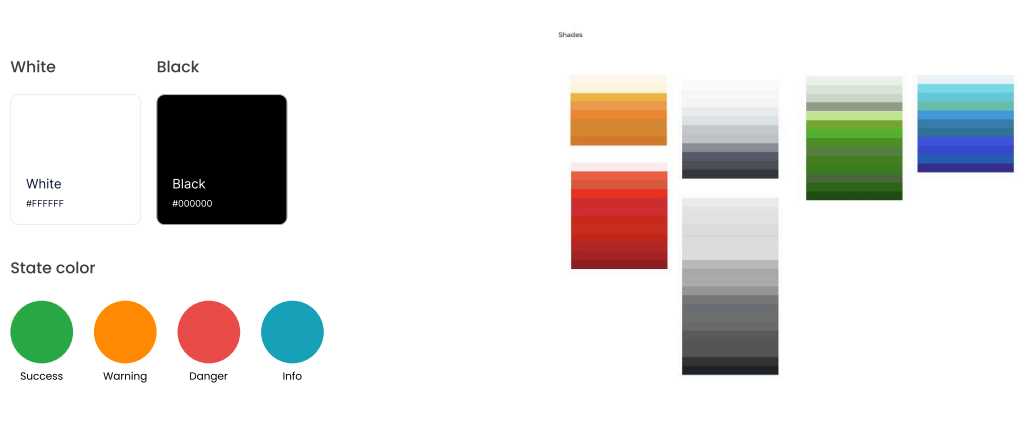
- Simple, clear language
- Consistent navigation and design patterns
- Helpful error messages and instructions

Robust – Content must work with assistive technologies (like screen readers).

- Use semantic HTML
- ARIA roles (use when necessary)
- Test on multiple devices and browsers

Design System

Colour


White
Black
White
#FFFFFF
Black
#000000
State color
Success
Warning
Danger
Info
Shades

Typography

Why Popins? I chose Poppins as the main typeface for our Sabay mobile banking app due to its versatility and readability. Its clean design ensures legibility for headings and body text, even on smaller screens. Poppins also provides a professional yet friendly look that aligns with the trustworthiness and security expected from a banking app. Additionally, its support for Khmer allows us to cater seamlessly to Cambodian users.

Headings	
Heading level 1	Font size: 40 | Line-height: 150% | Font: Poppins
Heading level 2	Font size: 36 | Line-height: 150% | Font: Poppins
Heading level 3	Font size: 32 | Line-height: 150% | Font: Poppins
Heading level 4	Font size: 24 | Line-height: 150% | Font: Poppins
Heading level 5	Font size: 20 | Line-height: 150% | Font: Poppins
Heading level 6	Font size: 18 | Line-height: 150% | Font: Poppins

Body Text	
Body text Large SemiBold Body text Large Regular Body text Large Underline	Font size: 16 | Line-height: 150% | Font: Poppins
Body text Medium SemiBold Body text Medium Regular Body text level 2 Underline	Font size: 14 | Line-height: 150% | Font: Poppins
Body text Small SemiBold Body text Small Regular Body text Small Underline	Font size: 12 | Line-height: 150% | Font: Poppins
Body text Mini Small SemiBold Body text Mini Small Regular Body text Mini Small Underline	Font size: 10 | Line-height: 150% | Font: Poppins

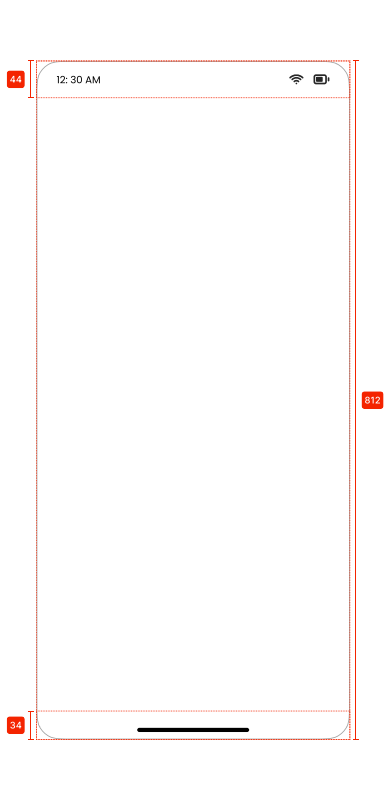
Spacing

All spacing for components and typography is done in 8px spatial system.

8px 16px 24px 32px 40px 48px

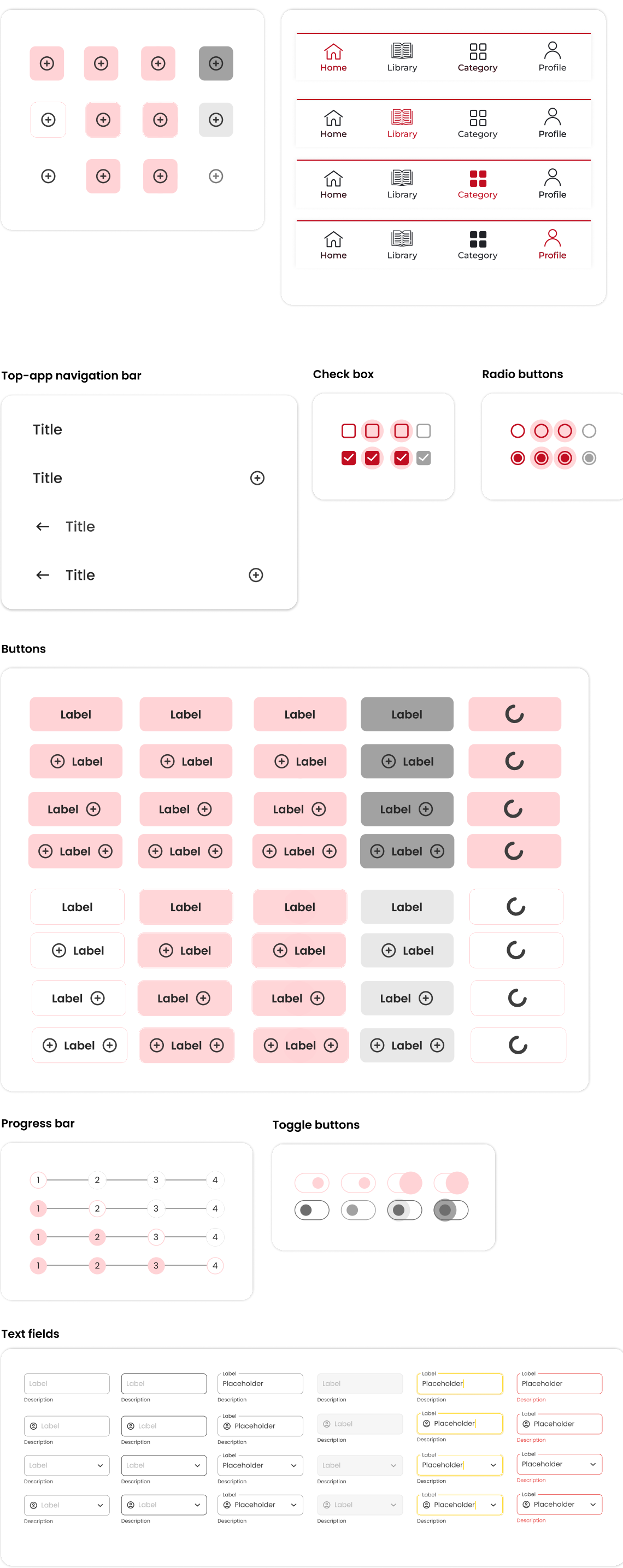
Gride

A grid is a framework in design systems that uses columns and rows to organize content. It helps me create consistent, balanced, and visually appealing layouts for our apps, and other digital products.


44
12:30 AM
812
34

Element

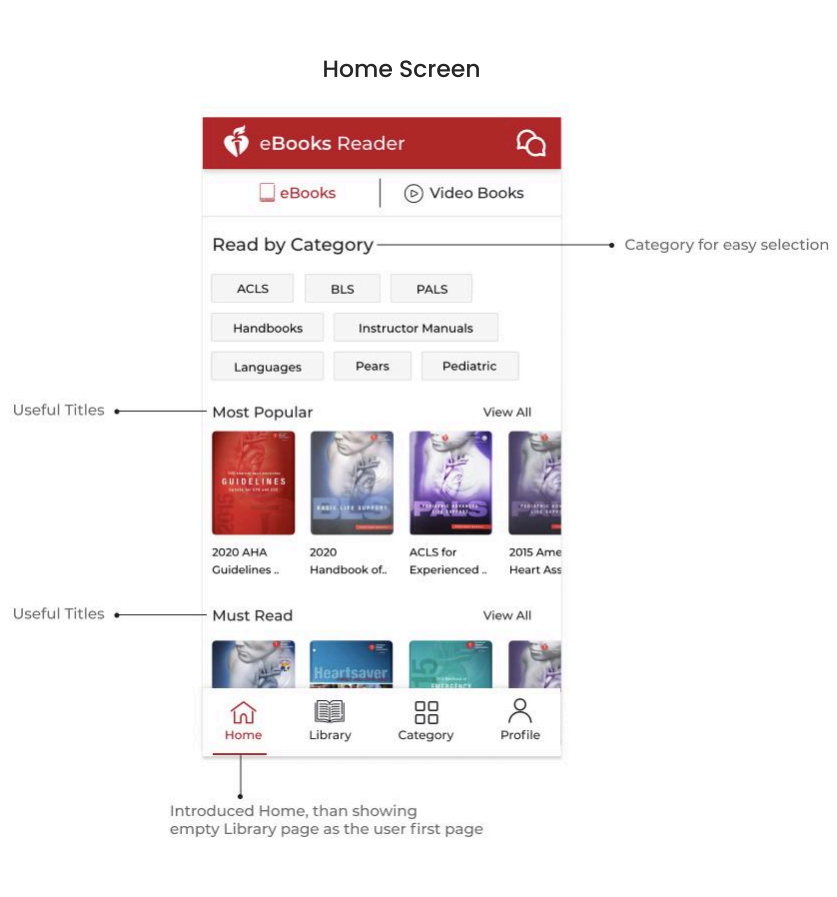
Elements are the fundamental building blocks that make up the user interface, and they encompass various components.


Icon button
Tab bar/ Action bar
Home
Library
Category
Profile
Top-app navigation bar
Title
Title
Title
Title
Check box
Radio buttons
Buttons
Label
Progress bar
1
2
3
4
Toggle buttons
Text fields
Label
Placeholder
Description

Visual Design

Visual design is a field that focuses on the aesthetics and usability of primarily digital interfaces.

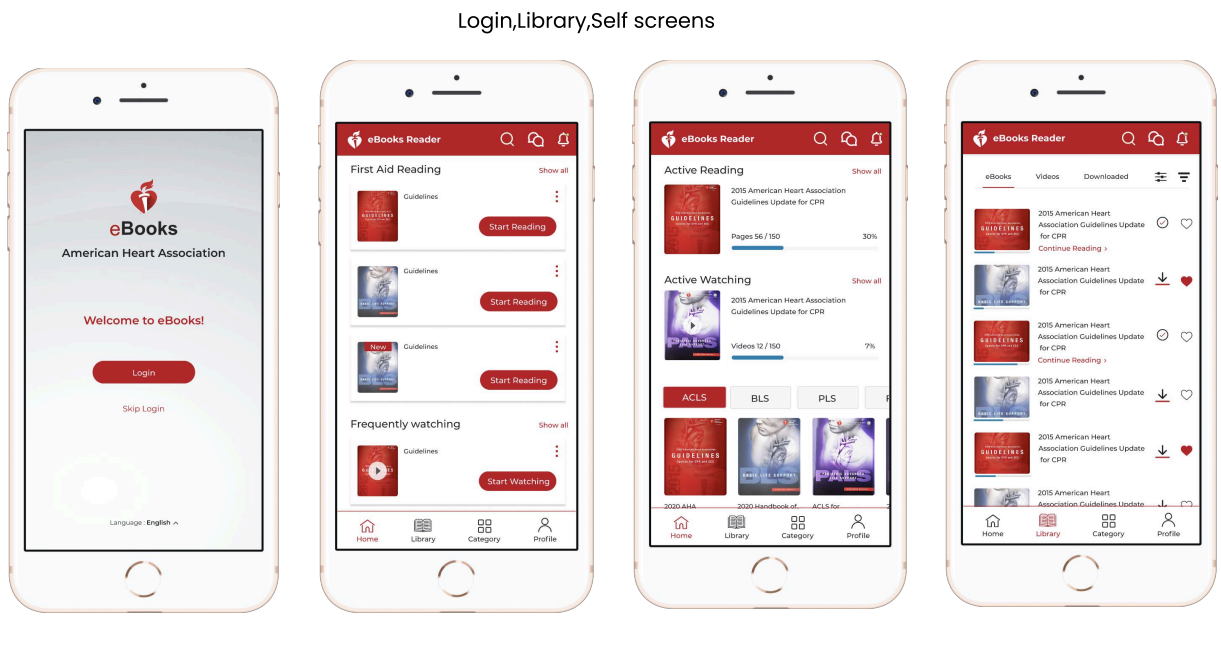
Home Screen


eBooks Reader
eBooks
Video Books
Read by Category
ACLS
BLS
PALS
Handbooks
Instructor Manuals
Languages
Pears
Pediatric
Most Popular
View All
2020 AHA Guidelines...
2020 Handbook of...
ACLS for Experienced...
2015 Ame Heart Ass
Must Read
View All
Home
Library
Category
Profile
Category for easy selection
Useful Titles
Useful Titles
Introduced Home, than showing empty Library page as the user first page

Application feature

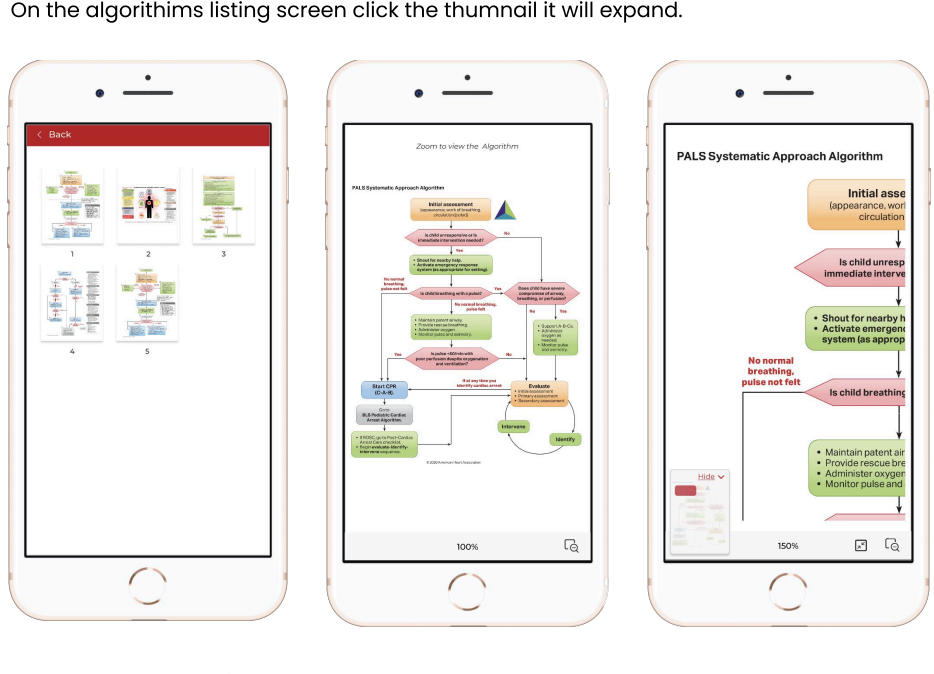
Primary Screens

Login,Library,Self screens


eBooks
American Heart Association
Welcome to eBooks!
Login
Skip Login
eBooks Reader
First Aid Reading
Start Reading
Frequently watching
Start Watching
Active Reading
Active Watching
ACLS
BLS
PLS

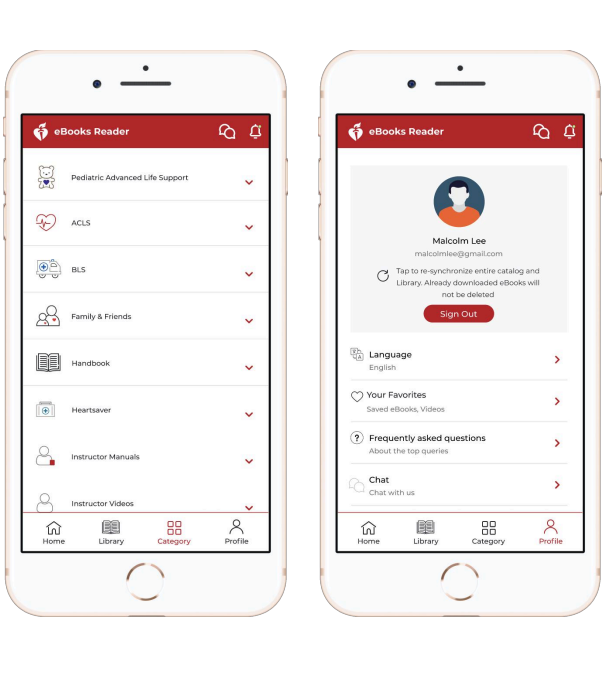
Algorithims view Feature

On the algorithims listing screen click the thumnail it will expand.


Back
Zoom to view the Algorithm
PALS Systematic Approach Algorithm
100%
150%

Catagory and profile

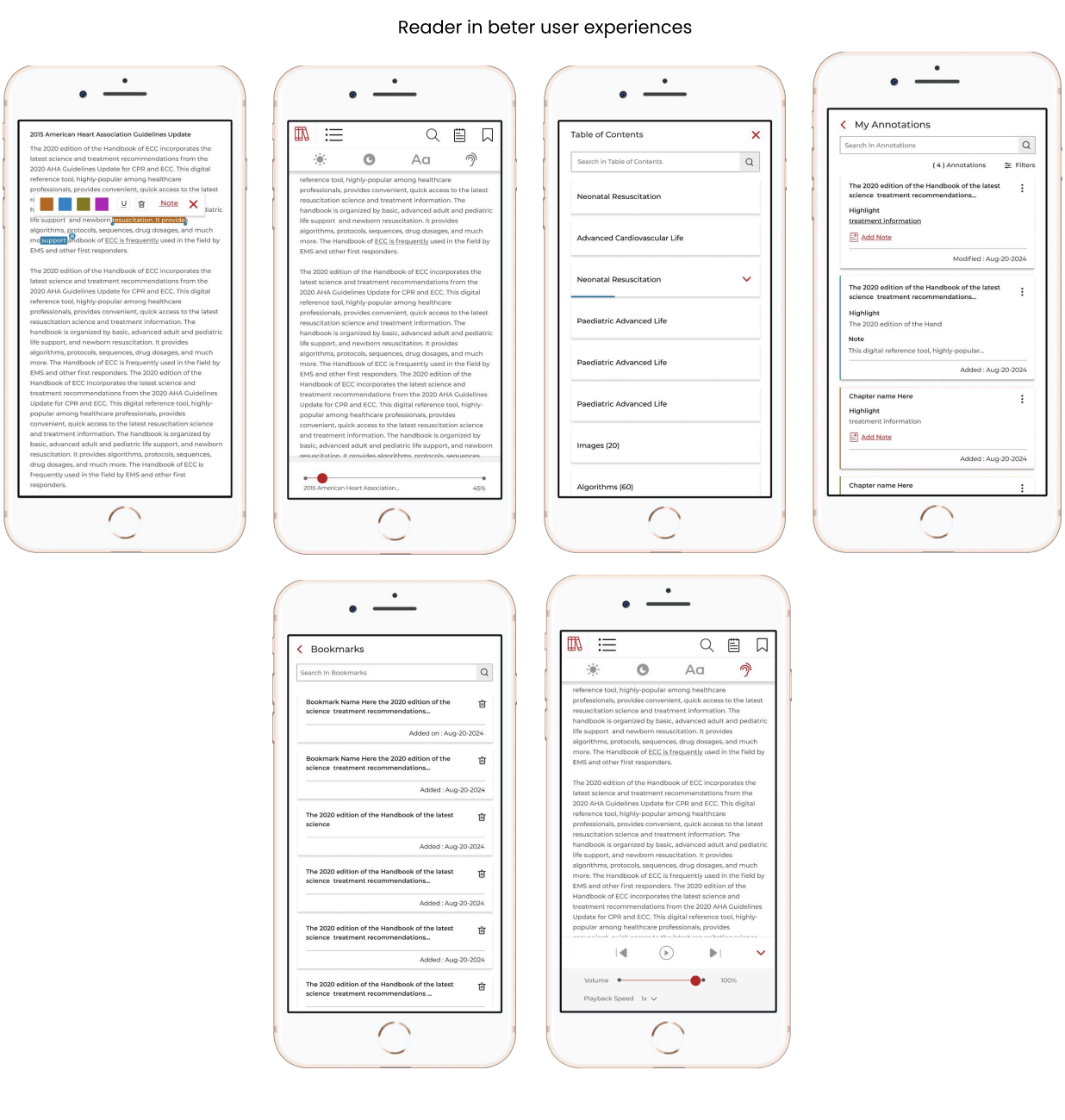
Use scan feature to make the payment such as QR


eBooks Reader
Pediatric Advanced Life Support
ACLS
BLS
Family & Friends
Handbook
Heartsaver
Instructor Manuals
Instructor Videos
Malcolm Lee
malcolmlee@gmail.com
Sign Out
Language
English
Your Favorites
Saved eBooks, Videos
Frequently asked questions
About the top queries
Chat
Chat with us
Home
Library
Category
Profile

ebooks Reader View

Reader

Reader in beter user experiences


2015 American Heart Association Guidelines Update
Note
Aa
Table of Contents
Search in Table of Contents
Neonatal Resuscitation
Advanced Cardiovascular Life
Neonatal Resuscitation
Paediatric Advanced Life
Paediatric Advanced Life
Paediatric Advanced Life
Images (20)
Algorithms (60)
My Annotations
Search in Annotations
Highlight
Add Note
Note
Chapter name Here
Bookmarks
Search in Bookmarks
Volume
100%
Playback Speed

UX Benchmarking

Based on the user research findings, the following solutions are addressed

Usability
Task Success Rate, Task Completion Time, Error Rate
Achieved 40% product revenue growth in three months by planning and launching four new key features

Engagement
Reduced Time on Task, Reduced Bounce Rate, Reduced Click-through Rate

User Satisfaction
Net Promoter Score (NPS), System Usability Scale (SUS)

Accessibility
WCAG compliance score, screen reader compatibility

Thank you

Ashok Kumar Nayak
Website: https://www.ashoknayak.in
Linkedin: https://www.linkedin.com/in/ashok-ux/