Team Alexandria

Deliverable 5 - Closing: User Interface Design, Program design and System Implementation

IS436 - Structured Systems Analysis and Design

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Team Members

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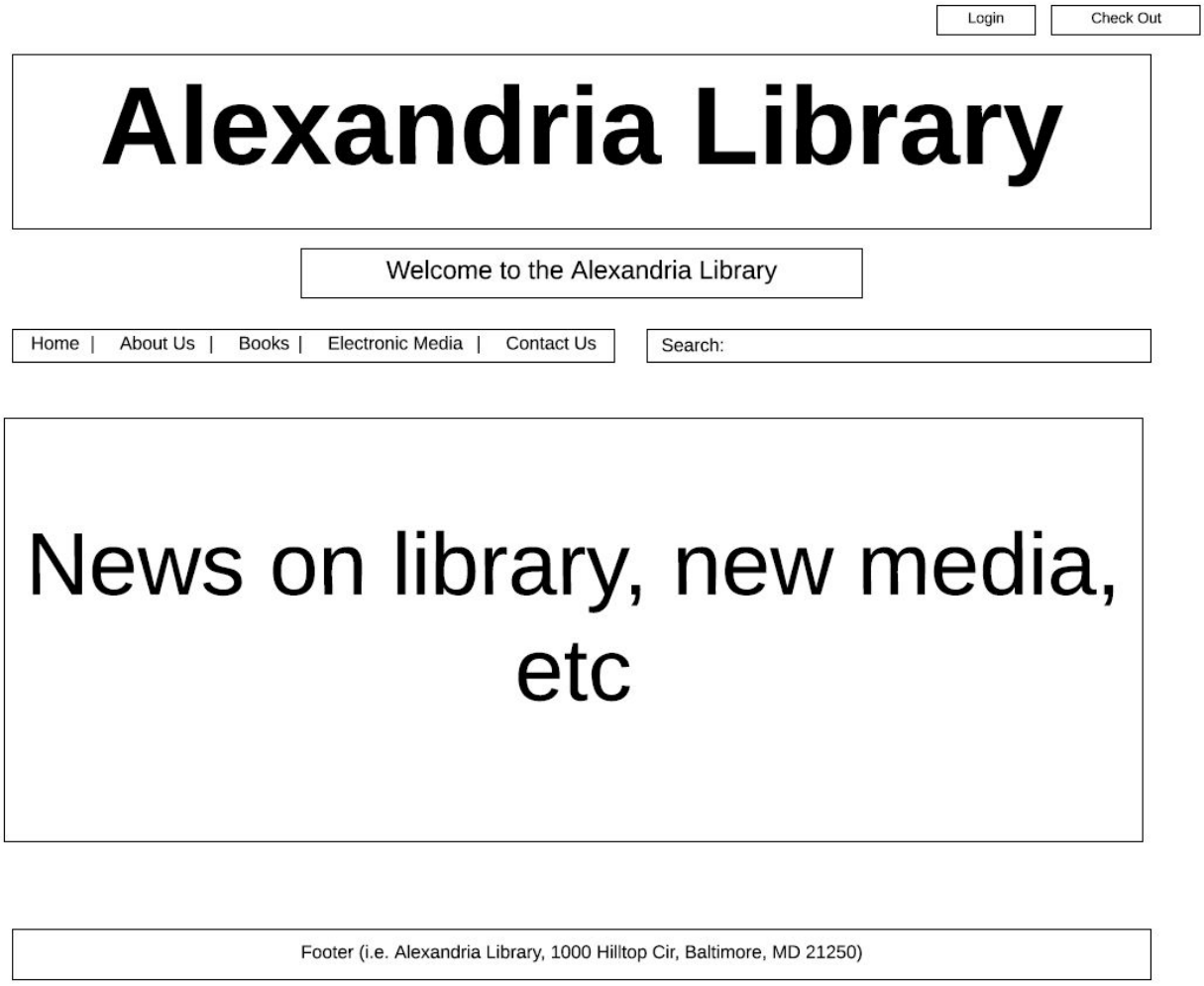
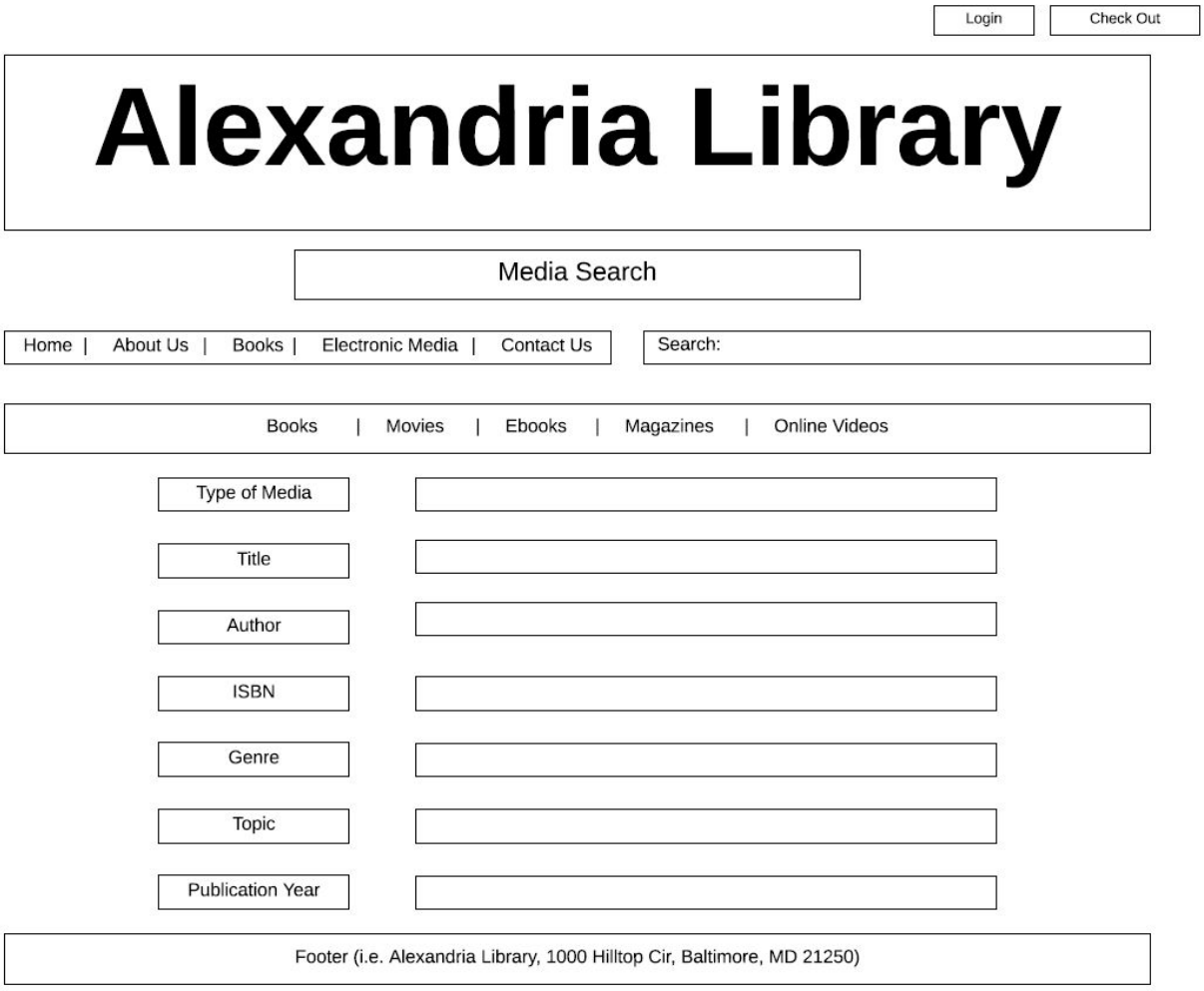
A. Interface Design

1)

Home Page



Search Page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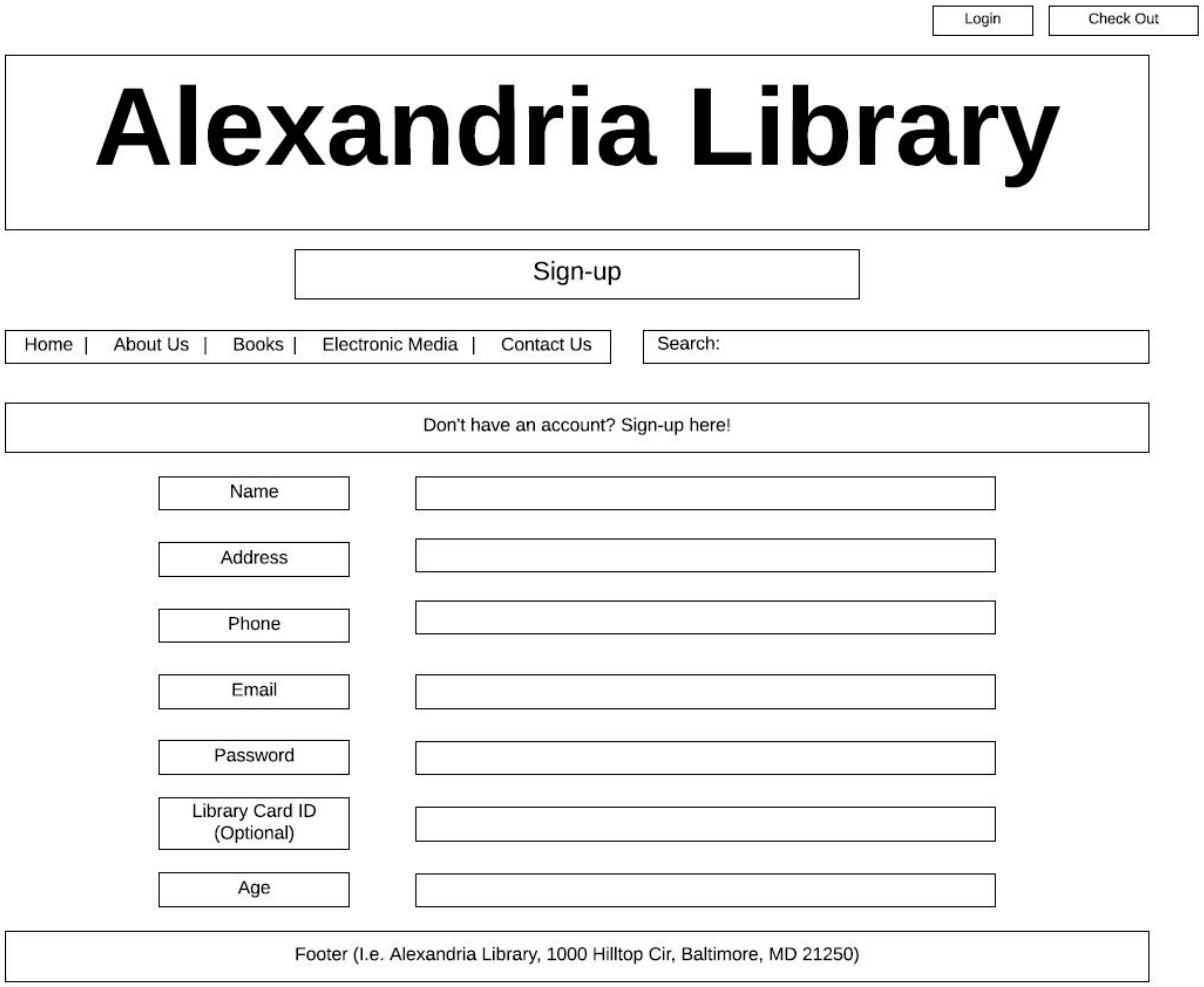
Type of Media
Title
Author
ISBN
Genre
Topic
Publication Year
Footer (i.e. Alexandria Library, 1000 Hilltop Cir, Baltimore, MD 21250)

Sign-up Page



2) Interface Standards

The standards we followed for our user interface design was to keep each page consistent with the library logo/title at the top, login and checkout page located at the top right corner, page title under the logo/title, navigation bar with consistent items unter the page title, search bar for general searches next to the navigation bar, main page contents in the middle, and a consistent footer along the bottom of the page. The layout would be consistent and simple so all users will navigate with ease and without getting lost. The site can be also be easily navigated between pages, one click to any wanted page. The page layout and navigation should accommodate to most user personas. Our site map will not have many deep layer, maybe 2 at most for the search function, or maybe 4 at most with an advanced search. We will have error messages/windows for errors in log-in, sign-up, checkout, and search functions. The font sizes will also be adequate to accommodate all users. The colors we will use will be effective in attracting customers, but not too aggressive. The search page will be basic and the input fields can be used as needed. We have implemented a touch screen design for mobile devices. The inputs will be specified for the fields to reduce input errors, as it will cause less frustration.

B. Program Design

A functional demo of the system can be found at http://is436.jasonspriggs.com/home.

Administrative functions can be found by clicking the Admin link in the footer and logging in with user: admin, password: umbc.

Testing of library card holder functions can be tested using 1234 as the library card number and 1234 as the PIN.

C. System Implementation
GitHub Link - https://github.com/jasonspriggs/umbcis436/tree/master/final

System Requirements

	Standard Client	**Standard Web Server**	**Standard Application Server**	**Standard Database Server**
Operating System	Windows 10	Linux	Linux	Linux
Special Software	Microsoft Office Adobe Acrobat Reader Google Chrome	CentOS HTML CSS JavaScript	Java(Spring)	MariaDB
Hardware	Intel Core i7-7700K Quad Core processor Dell R710 Dell KVM Power Distribution Units Uninterruptible Power Supply Unifi Security Gateway pro 22-inch LCD Monitor 500-GB Disk Drive	500-GB Disk Drive Intel Core i7-7700K Quad Core processor	500-GB Disk Drive Intel Core i7-7700K Quad Core processor	1-TB Disk Drive RAID Intel Core i7-7820X Eight core processor

Network	Always-on Broadband Dial-up at 56 Kbps, possible with some performance loss	Dual 100 Mbps Ethernet	Dual 100 Mbps Ethernet	Dual 100 Mbps Ethernet

D. Updated Work Plan

Task Name	Responsible	Start	End	Days	Status
Sprint 1					
Initiating & Planning	Alex Cha.	2/26	3/5	7	Complete
Gather Info & Analysis	Omar C.	3/2	3/12	10	Complete
Sprint 2					
Plan System Engineering	Amit,Jason	3/15	3/23	8	Complete
Acquire Hardware & Software	Jason,Mehak	3/15	3/30	15	Complete
Installation	Amit,Alex	3/30	4/9	10	Complete
Implementation	Omar, Mehak	4/9	4/19	10	Complete
Sprint 3					
Prepare and Provide Training	Alex Cha.	4/9	4/24	15	Complete
Provide Support	Amit D.	4/24	5/1	7	Complete

Monitor Data	Omar C.	4/24	5/1	7	Complete
Testing	Omar C.	4/24	5/4	10	Complete
Sprint 4					
Document System	Mehak C.	4/24	5/5	11	Complete
Continuous Resolvance of Issues	All	5/5	12/1	210	In Progress

F. Team Experience

SDLC Process Difficulties -

Planning - During the planning phase we ran into the challenge of what the actual project would accomplish. We wanted to have a clear vision of what was needed from the application. This was quite challenging but we conducting a few group meetings and were able to come up with a good idea.

Analysis- We wanted to test how feasible it would be to implement the new project and to do this we conducted a feasibility study . The feasibility study was very rewarding because it helped us understand how much of a difference the concept we drew up would make.

Design - During the design phase we did not face any challenges as we all agreed on the UI, program and data storage designs. The main designs were created by our scrum master and he did accept input for everyone else on the group.

Implementation - The only major challenge we faced in implementation was the choice of who would implement the program. We were torn between outsourcing and a hybrid of outsourcing and inhouse. We decided to go with hybrid implementation because it would allow for more professional implementation of the program.