

# System Design Documentation

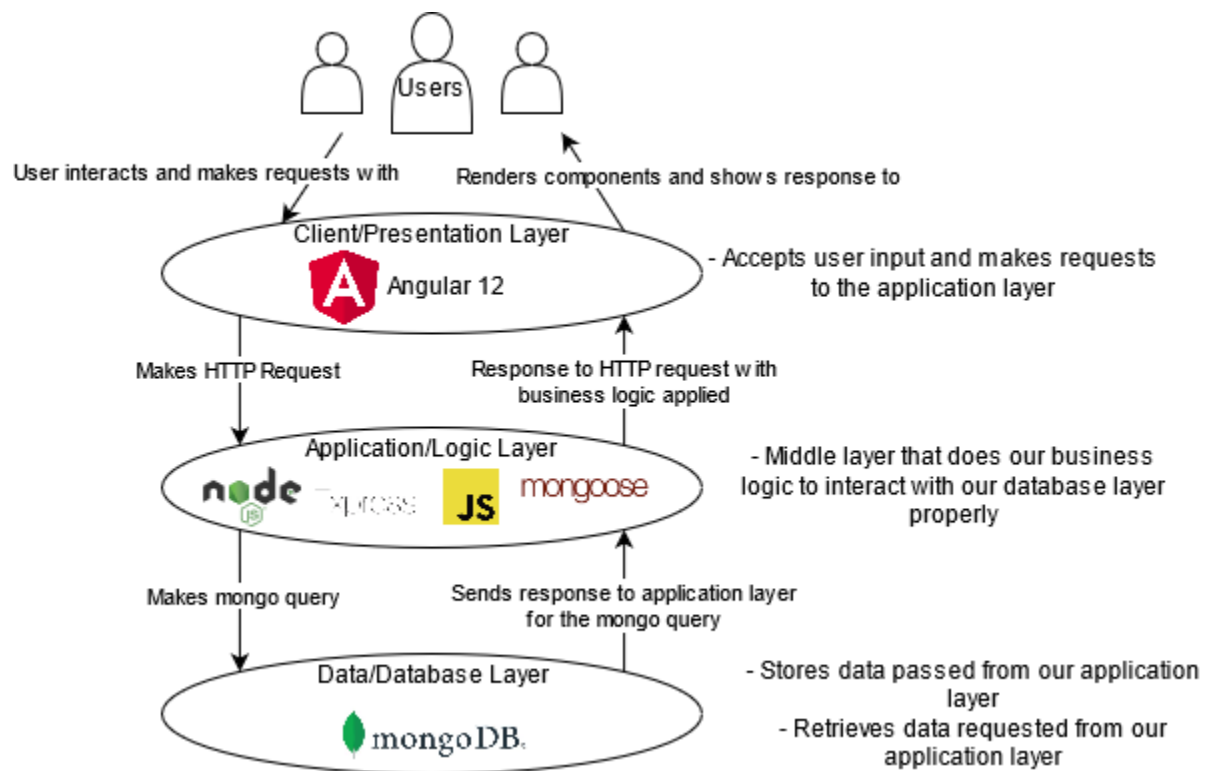
## Brute Force Solution

### Sprint 4

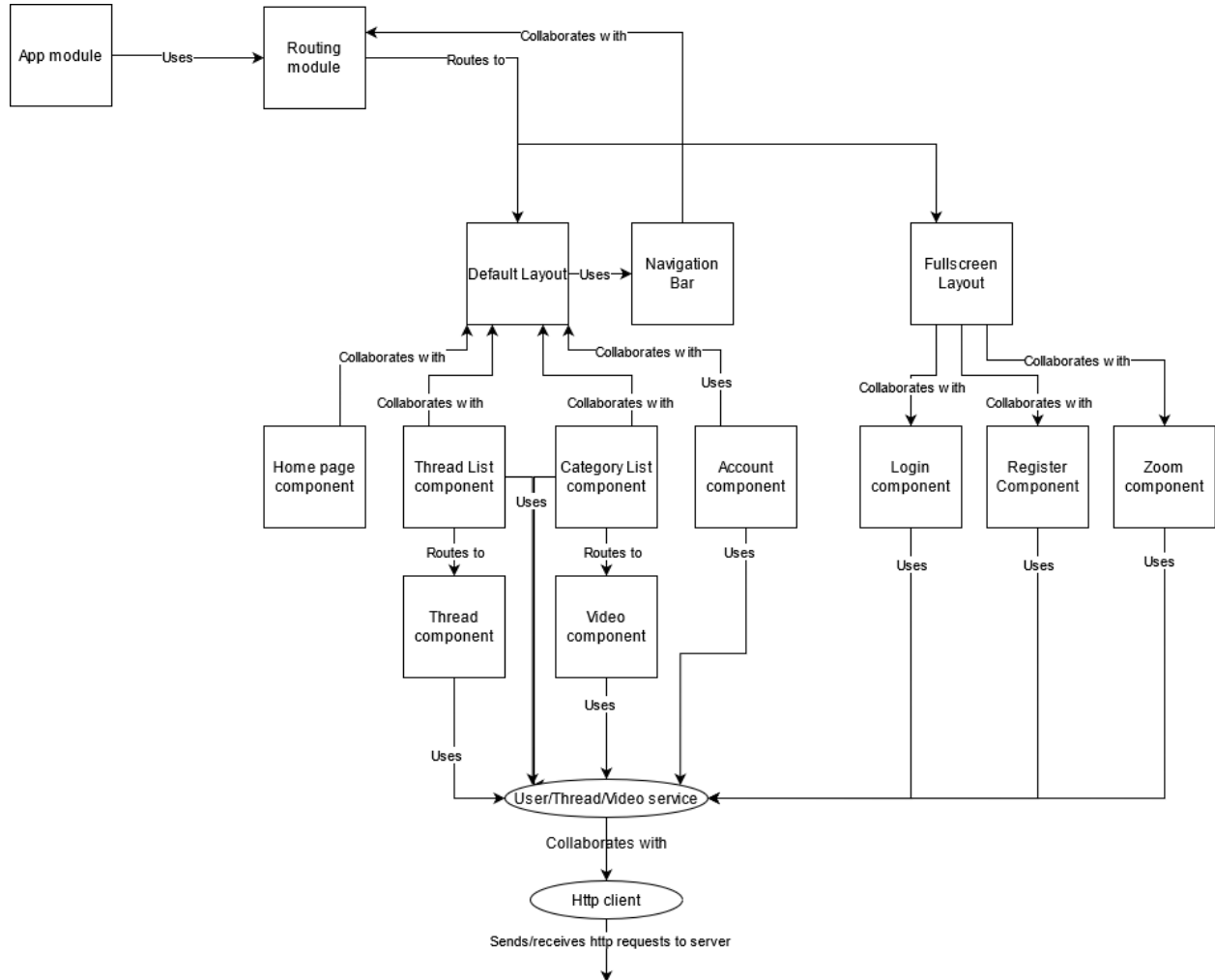
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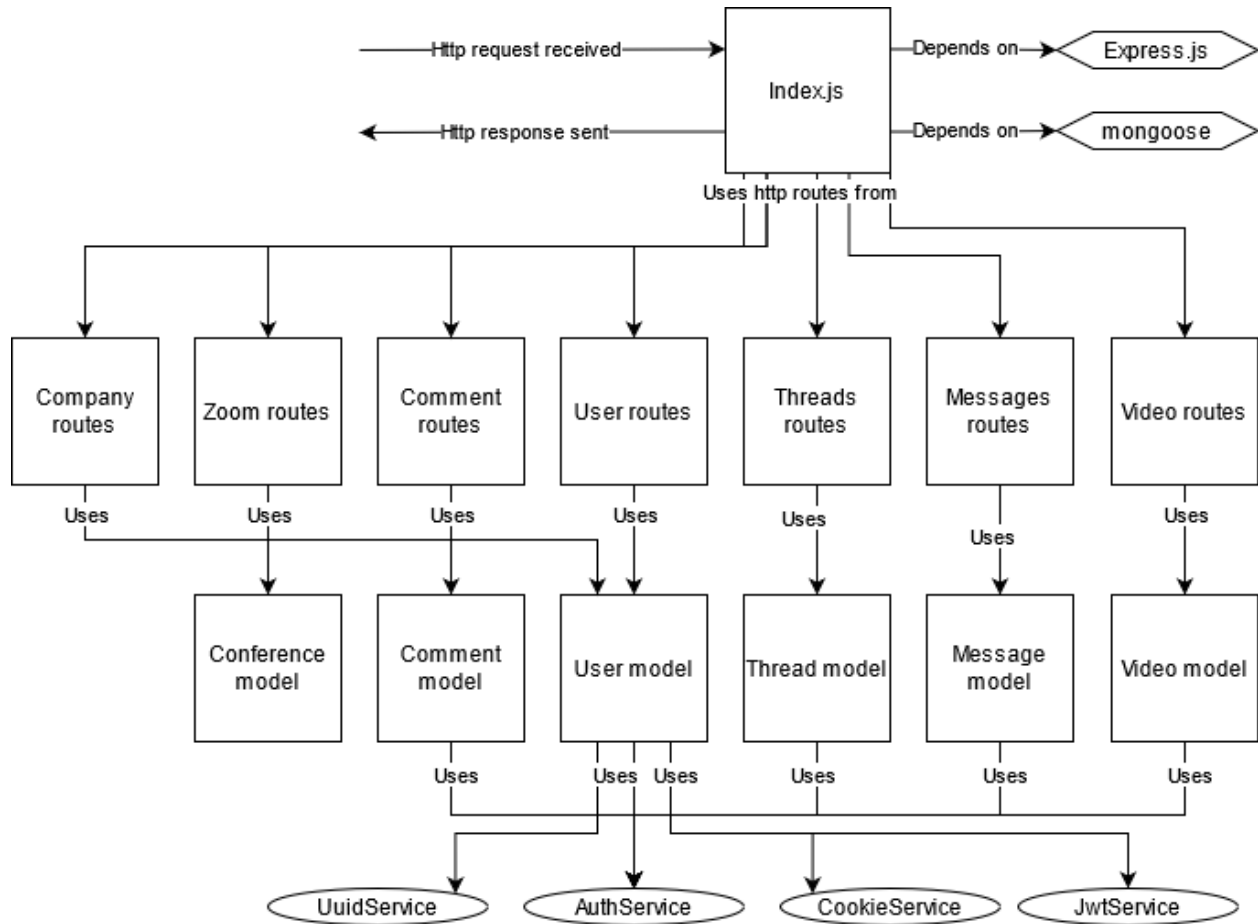
# Three-Tiered architecture diagram



# Client system diagram



# Server system diagram



# CRC CARDS

## Front End

Component Name: App module	
Parent: None Child: Router Outlet	
Responsibility: <ul style="list-style-type: none"><li>• Root of application, contains the routing outlet.</li></ul>	Collaborators: <ul style="list-style-type: none"><li>•</li></ul>

Class Name: Routing module	
Parent: App Module Child Class: None	
Responsibility: <ul style="list-style-type: none"><li>• Changes this page to any of the routes</li></ul>	Collaborators: <ul style="list-style-type: none"><li>• Landing page component</li><li>• Login component</li></ul>

Component Name: Default layout component	
Parent Class: Routing module Child Class: None	
Responsibility: <ul style="list-style-type: none"><li>• Displays the navigation bar, and the content of the page</li></ul>	Collaborators: <ul style="list-style-type: none"><li>• Navigation Bar</li><li>• Home page component</li><li>• E-learning component</li><li>• Community component</li><li>• User profile component</li></ul>

Component Name: Fullscreen layout	
Parent Class: Routing module Child Class: None	
Responsibility: <ul style="list-style-type: none"><li>• Displays the component in the fullscreen layout</li></ul>	Collaborators: <ul style="list-style-type: none"><li>• Login component</li><li>• Register component</li></ul>

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Component Name: Navigation Bar	
Parent: None Child: None	
Responsibility: <ul style="list-style-type: none"> <li>• Links to Home, E-Learning, Community, User Profile</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Routing module</li> </ul>

Component Name: Sign Up component	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Collecting Personal information, username, password</li> <li>• Send gathered account information to back end for account creating</li> <li>• Log in link (already have an account)</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• User service</li> <li>• Routing module</li> </ul>

Component Name: Log In component	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Collect username and password</li> <li>• Send information to the back end for verification</li> <li>• Tools for accessing your account if password is forgotten</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Routing module</li> <li>• Sign Up component</li> <li>• User service</li> </ul>

Component Name: User Profile component	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Ability to edit user information</li> <li>• Collecting updated information from user and send it to the back end</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• User service</li> </ul>

Component Name: Home page component	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Acts as the central hub of the website</li> <li>• Displays a small section for editing user profile</li> <li>• Displays a small section for recommended threads</li> <li>• Displays a small section for recommended videos</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• User profile component</li> <li>• User service</li> <li>• Thread service</li> <li>• Videos service</li> </ul>

Component Name: E-Learning component	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Displays the categories (topics)</li> <li>• Links to E-learning videos</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Video service</li> </ul>

Component Name: Thread list component	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Displays threads for the user to interact with</li> <li>• Displays create thread button</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Thread service</li> </ul>

Component Name: User service	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Sends http requests to the back end for requests about users</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>•</li> </ul>



Component Name: Thread service	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Sends http requests to the back end for requests about threads</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>•</li> </ul>

Component Name: Video service	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Sends http requests to the back end for requests about videos</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>•</li> </ul>

Component Name: Company service	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Sends http requests to the back end for requests about companies</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>•</li> </ul>

Component Name: Like service	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Sends http requests to the back end for requests about likes</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>•</li> </ul>

Component Name: Comment service	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Sends http requests to the back end for requests about comments</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>•</li> </ul>

## Back End

Class Name: User route manager	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Receive information from front end collaborators</li> <li>• Create accounts in database</li> <li>• Verify existing account in database, and sending appropriate response</li> <li>• Edit account information in the database</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• User model</li> </ul>

Class Name: Thread route manager	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Adding a thread to the thread feed</li> <li>• Adding a comment underneath a thread given a thread ID</li> <li>• Incrementing likes on a thread given thread ID</li> <li>• Add a comment to a comment as a reply given a comment ID</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Thread model</li> </ul>

Class Name: Video route manager	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Getting video learning categories</li> <li>• Adding learning videos</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Video model</li> </ul>

Class Name: Comment route manager	
Parent Class: None Child Class: None	
Responsibility: <ul style="list-style-type: none"> <li>• Adding comments to videos/threads/etc</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Video model</li> <li>• Thread model</li> <li>• Comment model</li> </ul>

Class Name: User model	
Parent Class: Child Class: Personal User model, Company User model	
Responsibility: Stores following information <ul style="list-style-type: none"> <li>• Name/Username</li> <li>• Password</li> <li>• Email</li> <li>• Phone</li> <li>• Website Link</li> </ul>	Collaborators:

Class Name: Personal User model	
Parent Class: User Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Profile Picture</li> <li>• Resume</li> <li>• Skills</li> <li>• Education</li> </ul>	Collaborators:

Class Name: Company User model	
Parent Class: User Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Address</li> <li>• Logo</li> <li>• Sector</li> <li>• Job applications</li> </ul>	Collaborators:

Class Name: Thread model	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Contains text content</li> <li>• Contains metadata: <ul style="list-style-type: none"> <li>Date posted</li> <li>User who Posted</li> <li>Is this post a reply</li> </ul> </li> <li>• Keeps a track of all comments under the thread this thread</li> </ul>	Collaborators:

Class Name: Comment model	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Contains text content that is to be added to a thread post or video</li> <li>• Contains information about the commenter</li> </ul>	Collaborators:

Class Name: Video Comment model	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Contains video title</li> <li>• Contains video description</li> </ul>	Collaborators:

<ul style="list-style-type: none"> <li>• Contains video poster</li> <li>• Contains video link</li> </ul>	
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Class Name: Conference model	
Parent Class: Child Class:	
Responsibility: <ul style="list-style-type: none"> <li>• Contains conference information such as ZoomId (meeting number), zoomLink, etc</li> </ul>	Collaborators: