



# Ampact

## Sprint 4 System Design Document

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## Frontend CRC Cards

<b>Class Name:</b> App	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Manages the routing for the frontend web app</li></ul>	<b>Collaborators</b> <ul style="list-style-type: none"><li>• React</li><li>• React Router</li><li>• Landing</li><li>• Login</li><li>• Registration</li><li>• authService</li><li>• GroupProfile</li><li>• GroupProfileEdit</li><li>• GroupProfileCreate</li><li>• DefaultPage</li><li>• Browse</li><li>• PostFeed</li><li>• PostFeedAnnouncements</li><li>• Calendar</li></ul>

<b>Class Name:</b> Landing	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Renders the landing page of the app</li></ul>	<b>Collaborators</b> <ul style="list-style-type: none"><li>• React Router</li><li>• DefaultPage</li></ul>

<b>Class Name:</b> Login	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Renders the login page for the application</li></ul>	<b>Collaborators</b> <ul style="list-style-type: none"><li>• Controller</li><li>• authService</li></ul>

<b>Class Name:</b> Registration	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the registration page for the application</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• authService</li> </ul>

<b>Class Name:</b> UserProfile	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the profile page for the application</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• DefaultPage</li> <li>• UserPage</li> </ul>

<b>Class Name:</b> NavBar	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the navigation bar for the application</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• authService</li> </ul>

<b>Class Name:</b> DefaultPage	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders universal UI elements for the application</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• NavBar</li> </ul>

<b>Class Name:</b> Browse	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders uploaded videos for the application</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• VideoTagSection</li> <li>• VideoPreview</li> <li>• DefaultPage</li> <li>• controller</li> </ul>

<b>Class Name:</b> authService	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Handles the user login, signout, and register after calling the backend</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> controller	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Sends HTTP requests to the backend and processes the response and errors</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>•</li> </ul>

<b>Class Name:</b> Groups	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Displays the group name and bio in a small area</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>•</li> </ul>

<b>Class Name:</b> Group	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Adds and removes members of the group</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>controller</li> </ul>

<b>Class Name:</b> GroupsList	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Displays other groups in a list</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> GroupProfile	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Display's the group's profile</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>Group</li> <li>GroupMemberList</li> <li>React Router</li> </ul>

<b>Class Name:</b> GroupProfileCreate	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Sends HTTP requests to the backend and processes the response and errors</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>Group</li> <li>GroupMemberList</li> <li>controller</li> <li>GroupsList</li> <li>controller</li> </ul>

<b>Class Name:</b> GroupProfileEdit	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the page to edit a group</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> GroupMember	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Shows a member's name and role in a group</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> GroupMemberList	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Shows a the list of a group's members</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• GroupMember</li> </ul>

<b>Class Name:</b> SingleVideoAdd	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the page to add a video</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> SingleVideoPage	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the page showing all videos</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• VideoTagSection</li> <li>• Controller</li> <li>• authService</li> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> CalendarPage	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the page showing calendar events</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• authService</li> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> VideoTagSection	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders video tags</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• controller</li> </ul>

<b>Class Name:</b> VideoPreview	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a single video preview</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• VideoTagSection</li> </ul>



<b>Class Name:</b> SearchUserProfiles	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the page to where you can search users</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• controller</li> </ul>

<b>Class Name:</b> UserPage	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the user profile module</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>•</li> </ul>

<b>Class Name:</b> UserProfileEdit	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders edit user profile page</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> UserProfileItem	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a single user profile</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>•</li> </ul>

<b>Class Name:</b> UserProfileList	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a list of user profiles</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• UserProfileItem</li> </ul>

<b>Class Name:</b> PostFeed	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a post feed</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Post</li> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> PostFeedAnnouncements	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a post feed for announcements</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Post</li> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> Comment	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a single comment</li> <li>• Allows users to view replies to the comment</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• ReplySection</li> </ul>

<b>Class Name:</b> CommentSection	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a list of comments</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Comment</li> </ul>

<b>Class Name:</b> Reply	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a single reply</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> </ul>

<b>Class Name:</b> ReplySection	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a list of replies</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Reply</li> </ul>

<b>Class Name:</b> Post	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders a single post</li> <li>• Allows users to view comments on a post</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• CommentSection</li> </ul>

<b>Class Name:</b> MessageSection	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders messages sent between two users</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• DefaultPage</li> <li>• Socket.io</li> </ul>

<b>Class Name:</b> MessagePage	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• A directory page that shows which chats have recent messages</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• DefaultPage</li> </ul>

<b>Class Name:</b> DlbsPage
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<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the page with the deliverable details information</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Dlbs</li> </ul>

<b>Class Name:</b> Dlbs	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Contains the components for display the deliverable details</li> <li>• Accept a file to upload to the submission</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> </ul>

<b>Class Name:</b> DlbsCreate	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Receives the information for creating new deliverable</li> <li>• Sends HTTP request to backend for creating the new entry</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> </ul>

<b>Class Name:</b> Feedback	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Contains the component to display a submission's information including feedback and grade</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> </ul>

<b>Class Name:</b> FeedbackPdf	
<b>Parent Class (if any):</b>	

<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Contains the component to display a pdf along with it's navigation</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> FeedbackForm	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Contains the component to update feedback and grade for a submission</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>Controller</li> </ul>

<b>Class Name:</b> SingleFeedbackPage	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Renders the page for the 3 components feedback, feedbackForm and feedbackPdf</li> <li>Get the information and submit information to the designated user submission</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>Feedback</li> <li>FeedbackForm</li> <li>FeedbackPdf</li> <li>Controller</li> </ul>

<b>Class Name:</b> SingleUserSubmission	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Renders the page for the 2 components feedback and feedbackPdf</li> <li>Get the information and submit information to the designated user submission</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>Feedback</li> <li>FeedbackPdf</li> <li>Controller</li> </ul>

<b>Class Name:</b> DeliverableFeed	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the with all the assignment modules with all user submissions</li> <li>• Renders a create new assignment button</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• Deliverable</li> <li>• AuthService</li> </ul>

<b>Class Name:</b> AssignmentFeed	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the with all the assignment modules with only a single user submissions who is logged in</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• UserDeliverable</li> <li>• AuthService</li> </ul>

<b>Class Name:</b> Deliverable	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the deliverable module with deliverable date created, due and total marks</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• SubmissionSection</li> </ul>

<b>Class Name:</b> UserDeliverable	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the deliverable module with deliverable date created, due and total marks</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• UserSubmission</li> </ul>

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<b>Class Name:</b> Submission	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the submission module for all user submission for a deliverable</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> </ul>

<b>Class Name:</b> UserSubmission	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the submission module for a single user submission for a deliverable</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> </ul>

<b>Class Name:</b> SubmissionSection	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders the collective submission modules for all user submission for a deliverable</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• Controller</li> <li>• Submission</li> </ul>

## Backend CRC Cards

<b>Class Name:</b> Server	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	

<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Establishes connection with mongoDB database</li> <li>• Set up and store login session</li> <li>• Send session cookies to front end</li> <li>• Encrypt private user information</li> <li>• Login and register user</li> <li>• Sets up sockets for private messaging</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• UserSchema</li> <li>• ProfileSchema</li> <li>• Group</li> <li>• Video</li> <li>• MessagesSchema</li> <li>• ChatroomSchema</li> <li>• Profile</li> </ul>
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<b>Class Name:</b> Authentication	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Restricts requests to authorized users</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• GroupSchema</li> </ul>

<b>Class Name:</b> Group	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Create group</li> <li>• Edit information for group</li> <li>• Retrieve group information from database</li> <li>• Add and remove members from groups</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• GroupSchema</li> <li>• UserSchema</li> </ul>



<b>Class Name:</b> Video	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Add video information in database</li> <li>• Retrieve video information using queries</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• VideoSchema</li> </ul>

<b>Class Name:</b> Profile	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Save profile information for users</li> <li>• Retrieve profile information from database</li> <li>• Edit profile information from database</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• ProfileSchema</li> </ul>

<b>Class Name:</b> Search	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Search groups</li> <li>• Search user profiles</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• ProfileSchema</li> <li>• GroupSchema</li> </ul>

<b>Class Name:</b> Post	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Make posts</li> <li>• Delete posts</li> <li>• View post comments</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• PostSchema</li> <li>• CommentSchema</li> </ul>

<b>Class Name:</b> Comment	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Post comments</li> <li>• Delete comments</li> <li>• View comment replies</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• PostSchema</li> <li>• CommentSchema</li> </ul>

<b>Class Name:</b> Event	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Create events</li> <li>• View events</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• EventSchema</li> </ul>

<b>Class Name:</b> UserSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save group information</li> <li>• Defines how queries are retrieved from the database for groups</li> <li>• Defines how group data should be structured in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> VideoSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines where to save video information</li> <li>• Defines how queries are retrieved from the database for videos</li> <li>• Defines how video data should be structured in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> GroupSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save group information</li> <li>• Defines how queries are retrieved from the database for groups</li> <li>• Defines how group data should be structured in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> ProfileSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save entrepreneur information</li> <li>• Defines what queries from entrepreneur database should contain</li> <li>• Defines how entrepreneur data should be saved in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> EventSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save calendar event information</li> <li>• Defines how queries are retrieved from the database for events</li> <li>• Defines how calendar event data should be saved in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> PostSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save post information</li> <li>• Defines how queries are retrieved from the database for posts</li> <li>• Defines how post data should be structured in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> CommentSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save comment information</li> <li>• Defines how comments are retrieved from the database for posts</li> <li>• Defines how comment data should be structured in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> ChatRoomSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save chatroom information (messages, members, latest message)</li> <li>• Defines how chatroom are retrieved from the database for messaging pages</li> <li>• Defines how chartroom data should be structured in database</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• <b>Message</b></li> </ul>

<b>Class Name:</b> MessageSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save message information (content, sender, date)</li> <li>• Defines how messages are retrieved from the database for a message log page</li> <li>• Defines how message data should be structured in database</li> </ul>	<b>Collaborators</b>

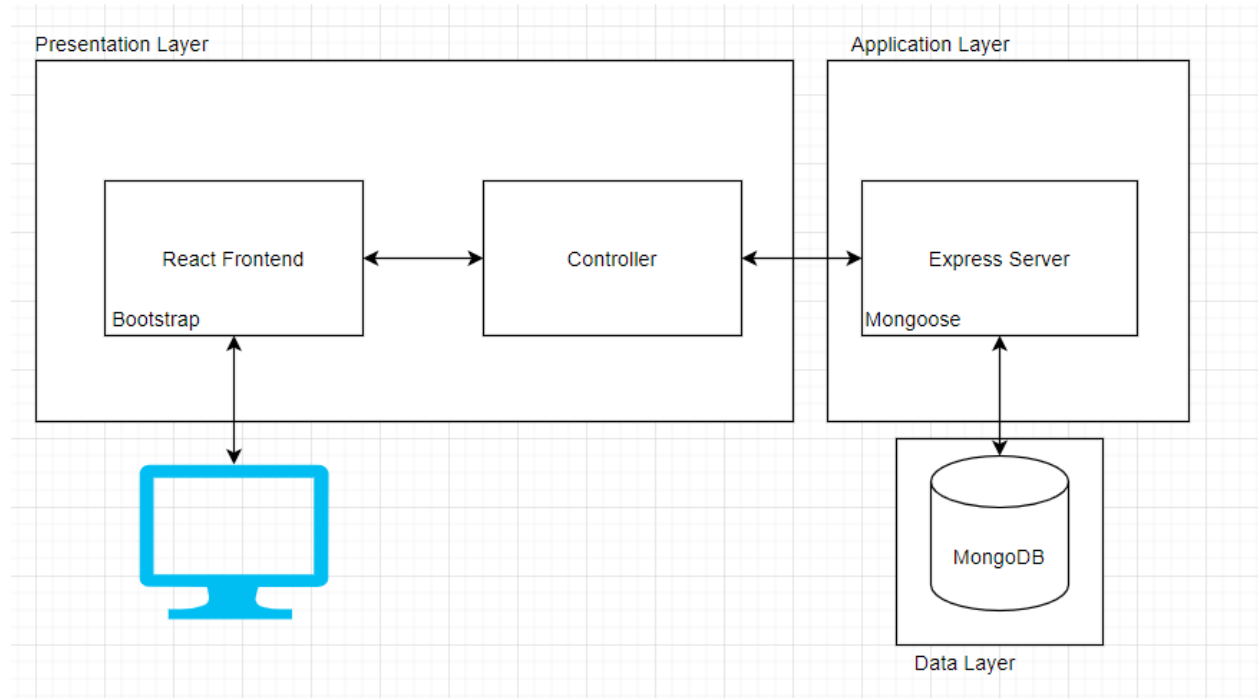
<b>Class Name:</b> DeliverablesSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save deliverable information (title, totalMark, dueDate)</li> <li>• Defines how deliverables are retrieved from the database.</li> <li>• Defines how deliverables data should be structured in database</li> </ul>	<b>Collaborators</b> <ul style="list-style-type: none"> <li>• <b>SubmissionsSchema</b></li> </ul>

<b>Class Name:</b> SubmissionsSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Defines which collection to save submission information (userID, submissionTime, mark)</li> <li>• Defines how submissions are retrieved from the database.</li> <li>• Defines how submissions data should be structured in database</li> </ul>	<b>Collaborators</b>

<b>Class Name:</b> InterestsSchema	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Defines which collection to save interests information (userID, list of interests)</li><li>• Defines how interests are retrieved from the database.</li><li>• Defines how interests data should be structured in database</li></ul>	<b>Collaborators</b> <ul style="list-style-type: none"><li>• <b>User</b></li></ul>

# System Architecture

This application will be using the 3-tiered architecture.



**React Frontend:** The presentation layer. This will contain the user interface for the application

**Controller:** Contains all the API requests to retrieve data from the application layer for the frontend to call.

**Express Server:** Handles the logic of the API requests and returns a response or error to the frontend. Connected to MongoDB using Mongoose.

**MongoDB:** The data layer. Where all information is stored (User, Profiles, Groups, Images, Videos, Events, Posts, Comments)