

Assignment 1	Project Summary
Course	Fullstack Application Development with Node.js + Express.js + React.js - 2018

Project author		
№	Панф	Face-to-face/ online
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Project name	IVAS-TECH Online Ordering system
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### 1. Short project description (Business needs and system features)

The Company IVAS-TECH needs automation of it's ordering system. The system will be developed as a *Single Page Application (SPA)* using **React.js** as front-end, and **Node.js + express** as backend technologies.

The main user roles (actors in UML) are:

- *Unregisterd User* – can only view the Log in/Register page.
- *Regular User* (extends *Registered User*) – can make new orders, track orders status change, view history of all his orders, re-order old order again, change or delete waiting order if allowed by and Administrator. Can create Regular User Groups or join Regular User Groups. Can view all User Groups that has created or joined. See all Orders (filter them) in a User Group and all other Regular Users in that Group.
- *Administrator* (extends *Registered User*) – can manage orders (change their status or send notification to user to fix details on their order which allows them to either modify order information or delete the order. Can view and search all orders of all users and filter them. Can view all User Groups and all Regular Users in a User Group.
- *SuperAdministrator* (extends *Administrator*) – can do all that Administrator can and also delete Orders, Users and User Groups.

### 2. Main Use Cases / Scenarios

Use case name	Brief Descriptions	Actors Involved
<b>2.1. See Log in/Register Page</b>	All not Logged in Users see only Log in/Register page.	All not Logged in Users
<b>2.2. Register</b>	<i>Anonymous User</i> can register in the system by providing a valid register information.	<i>Anonymous User</i>
<b>2.3. Make Order</b>	<i>Regular User</i> can make new Orders. When making new Order a User Group in which the Order will be	<i>Regular User</i>

	viewed by all Regular Users in that User Group can be selected.	
<b>2.4. Create User Group</b>	<i>Registered User</i> can create new User Group, invite new Regular Users to the Group, or copy User Group link which can be used by Regular Users to visit joining dialog. All Order for which the Group has been selected are visible by all Regular Users in that User Group. User Groups are hierarchical - User Groups are like Folders in File System and Orders are like Files in File System.	<i>Regular User</i>
<b>2.5. List Orders</b>	<i>Registered User</i> can list and filter all Orders that he made.  <i>Administrator</i> can browse Orders of all Regular Users and filter them	<i>Regular User, Administrator</i>
<b>2.6. Update Order</b>	<i>Administrator</i> can change status of an Order which may send Notification to the User that made that Order to edit it or delete it if the Order is waiting for approval..	<i>Administrator</i>
<b>2.7. Act on Notification</b>	<i>When Regular User</i> has Notification he sees all his Notification. Selecting Order Notification navigates the User to Edit/Delete Page of the Order associated with the selected Notification. Selecting User Group Notification navigates the User to User Group Info with option to join the Group or decline invitation. Joining group sends Notification for all Users in that User Group.	<i>Regular User</i>
<b>2.8. Invite to User Group</b>	<i>Regular User</i> can invite other Regular Users to the Group or copy User Group invitation link. Inviting a Regular User sends Notification to him.	<i>Regular User</i>
<b>2.9. Delete Data</b>	<i>SuperAdministrator</i> can delete Users, Orders and User Groups, Deleting a User deletes all his data, if he is a Regular User removes him from all User Groups he has joined, if he has created User Group <i>SuperAdministrator</i> can choose new Regular User to become Group owner if there are other Regular Users, if there are no other Regular Users the User Group is deleted.	<i>SuperAdministrator</i>

### 3. Main Views (SPA Frontend)

View name	Brief Descriptions	URI
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<b>3.1. Log in/Register</b>	Presents Log in / Register forms.	/
<b>3.2. Orders</b>	Displays Orders. If Regular User he sees all his Orders. If Administrator displays all Orders and adds ability to update Order status. If SuperAdministrator adds ability to delete Order.	/orders
<b>3.3. User Groups</b>	Presents ability to view and create Groups for Regular Users, for Administrators shows Groups, for SuperAdministrator adds ability to delete User Groups.	/groups
<b>3.4. Users</b>	Presents ability to view all Registered Users and ability to delete them.	/users
<b>3.5. Order</b>	Presents ability to make new Order.	/order

#### 4. API Resources (Node.js Backend)

<b>View name</b>	<b>Brief Descriptions</b>	<b>URI</b>
<b>4.1. Order</b>	Get Order details. POST new Order. PUT Order status update. DELETE Order.	/api/order
<b>4.2. Orders</b>	GET Orders.	/api/orders
<b>4.3. Groups</b>	GET Groups.	/api/groups
<b>4.4. Users</b>	GET <i>Users Info</i> .	/api/users
<b>4.5. User</b>	GET, PUT, DELETE User Info.	/api/user
<b>4.6. Group</b>	GET, PUT, DELETE <i>User Group</i> .	/api/group