#### SWE 4401

#### SOFTWARE REQUIREMENTS AND SPECIFICATIONS

#### **ROUTINE PLUS**

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### 1. User Case: Sign up

Title	Description
1. Goal	Authenticating a user
2. Primary Actors	Student, teacher, admin
3. Secondary Actors	System, database, google-auth
4. Steps	<ul> <li>Give name, user name, password and then submit.</li> <li>Login with gmail</li> <li>Verify uniqueness of email</li> <li>Validity of password</li> </ul>
5. Pre-Conditions	Visit website
6. Post-Conditions	Login
7. Exceptions	User can also log in with google-auth
8. Iteration	First iteration
9. Priority	Medium
10. Release	Final

## 2. User Case: Log in

Title	Description
1. Goal	Authenticating and storing individual actors details and creating customized UI and sending relevant notifications.
2. Primary Actors	Student, teacher, admin
3. Secondary Actors	System, database, google-auth
4. Steps	<ul> <li>Give username and password</li> <li>Verify information</li> <li>Let a user to log in</li> </ul>
5. Pre-Conditions	Sign-up
6. Post-Conditions	View routine, modify routine and chat
7. Exceptions	User can log in using google auth
8. Iteration	First iteration
9. Priority	medium
10. Release	Final

### 3. User Case: View Routine

Title	Description
1. Goal	All kinds of users will be able to view the routine according to their preferences.
2. Primary Actors	CR, teacher, admin, students
3. Secondary Actors	Database
4. Steps	<ul> <li>User will log in with their role</li> <li>User will modify the routine</li> <li>User will apply the changes</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when any updates are complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	High
10. Release	First release

## 4. User Case: Modify Routine

Title	Description
1. Goal	Specific users such as CR, admins, and teachers will be able to modify the routine according to their needs and apply changes.
2. Primary Actors	CR, teacher, admin
3. Secondary Actors	Database
4. Steps	<ul> <li>User will log in</li> <li>User will have to be admin , CR or teacher to modify</li> <li>User will modify the routine</li> <li>User will apply the changes</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system. Users have to have the authority to modify the routine.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the updating is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	High
10. Release	First release

### 5. User Case: Swap classes

Title	Description
1. Goal	Specific users such as CR, admins, and teachers will be able to swap the classes according to their needs and apply changes.
2. Primary Actors	CR, teacher, admin
3. Secondary Actors	Database
4. Steps	<ul> <li>User will log in</li> <li>User will have to be admin , CR or teacher to modify</li> <li>User will modify the routine</li> <li>User will apply the changes</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system. Users have to have the authority to swap classes.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the updating is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	High
10. Release	First release

### 6. User Case: Cancel class

Title	Description
1. Goal	Specific users such as teachers will be able to cancel the classes according to their needs and apply changes. CR can cancel classes with permission from the teacher or admin.
2. Primary Actors	CR, teacher, admin
3. Secondary Actors	Database
4. Steps	<ul> <li>User will log in</li> <li>User will have to be admin , CR or teacher to Cancel</li> <li>User will cancel a class the routine</li> <li>System will send notifications</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system. Users have to have the authority to cancel classes.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the cancellation is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	High
10. Release	First release

## 7. Use Case: Chat

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Title	Description
1. Goal	Students, Class Representatives, Teachers can chat in a Public Group or Inbox to discuss Routine Adjustments.
2. Primary Actors	Students, Teachers, Class Representatives, Admin
3. Secondary Actors	Database
4. Steps	System      Check Login     Typing Module     Post Text     Generate Notification  User     Type Messages     Send     Check Notifications
5. Pre-Conditions	User Must be Logged in to Use Chat Features
6. Post-Conditions	Before modifying Routine chat system can be used
7. Exceptions	
8. Iteration	Building Group Chat     Adding Private Chat System
9. Priority	Medium
10. Release	Second release

# 8. Use Case: Group Chat

Title	Description
1. Goal	Students, Class Representatives, Teachers can chat in a Public Group to discuss Routine Adjustments.
2. Primary Actors	Students, Teachers, Class Representatives
3. Secondary Actors	Database
4. Steps	System
5. Pre-Conditions	User Must be Logged in to Use Chat Features
6. Post-Conditions	Before modifying Routine chat system can be used
7. Exceptions	
8. Iteration	First Iteration
9. Priority	Medium
10. Release	Second release

## 9. Use Case: Private Chat

Title	Description
1. Goal	Class Representatives, Teachers and Admin can chat between each other to discuss Routine Adjustments.
2. Primary Actors	Teachers, Class Representatives, Admin
3. Secondary Actors	Database
4. Steps	System
5. Pre-Conditions	User Must be Logged in to Use Chat Features
6. Post-Conditions	Before modifying Routine chat system can be used
7. Exceptions	
8. Iteration	Second Iteration
9. Priority	Medium
10. Release	Second release

# 10. User Case: Upload routine

Title	Description
1. Goal	Specific users such as CR, admins, and teachers will be able to upload the routine.
2. Primary Actors	CR, teacher, admin
3. Secondary Actors	Database
4. Steps	<ul> <li>User will log in</li> <li>User will have to be admin, CR or teacher to modify</li> <li>User will make changes or create the routine</li> <li>User will apply the changes</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system. Users have to have the authority to upload the routine.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the uploading is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	High
10. Release	First release

# 11. User Case: Grant Request

Title	Description
1. Goal	Specific users such as CR, admins, and teachers will request for to reflect the changes of the routine and based on that it will be accepted or rejected.
2. Primary Actors	CR, teacher, admin
3. Secondary Actors	Database
4. Steps	<ul> <li>User will log in</li> <li>User will have to be admin, CR or teacher to modify</li> <li>User will make changes or create the routine</li> <li>User will apply the changes</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system. Users have to have the authority to upload the routine.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the uploading is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	High
10. Release	First release

# 12. User Case: Notify

Title	Description
1. Goal	Specific users such as CR, admins, and teachers will request for to reflect the changes of the routine and based on that it will be accepted or rejected and the rest of the users will be notified.
2. Primary Actors	System
3. Secondary Actors	Database
4. Steps	<ul> <li>After the update is complete and it is granted then the notification system will be triggered.</li> <li>The notification system will notify all the users related to the system.</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system. Users will have to update the routine to trigger the notification.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the uploading is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	High
10. Release	First release

### 13. User Case: Add class

Title	Description
1. Goal	Specific users like teachers can add classes to the routine if there is no conflict with other slots.
2. Primary Actors	Teacher
3. Secondary Actors	Database
4. Steps	<ul> <li>User teacher has to log in first.</li> <li>User then will select a slot and use that slot to add his class.</li> <li>After that the user can apply the changes if there is no conflict.</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system with the proper role.
6. Post-Conditions	Users will be able to view routine. Then make changes to the routine and apply it.
7. Exceptions	
8. Iteration	First iteration
9. Priority	Medium
10. Release	Second release

# 14. User Case: Drag and drop class

Title	Description
1. Goal	Specific users like teachers can drag and drop classes in the routine if there is no conflict with other slots.
2. Primary Actors	Teacher
3. Secondary Actors	Database
4. Steps	<ul> <li>User teacher has to log in first.</li> <li>User then will select a slot and use that slot to drag and drop classes.</li> <li>After that the user can apply the changes if there is no conflict.</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the uploading is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	Medium
10. Release	Second release

## 15. User Case: Delete class

Title	Description
1. Goal	Specific users like teachers can delete classes in the routine.
2. Primary Actors	Teacher
3. Secondary Actors	Database
4. Steps	<ul> <li>After the deletion is completed and it is granted then the notification system will be triggered.</li> <li>The notification system will notify all the users related to the system.</li> </ul>
5. Pre-Conditions	Users have to be logged in to the system.
6. Post-Conditions	Users will be able to view routine. Other users will get notification about the changes when the uploading is complete.
7. Exceptions	
8. Iteration	First iteration
9. Priority	Medium
10. Release	Second release