

The context

There are a lot of training methods in our society. Generally, people go to training schools, use books, and buy online courses. But these means are expensive. A book can cost more than 100\$, while training school fees cost thousands of dollars. Then people turn back to platforms like Youtube to train themselves.

The problem

But the Youtube content isn't structured. There are a lot of course resources, on all topics, but the videos are scattered.

Existing solutions

One solution proposed to that problem are playlists, but this solution resolves only partially the problem because playlists generally concern only small parts of a learning domain.

Our solution

To resolve that problem, we are creating a platform that permits anybody to fully train himself, and for free.

Our platform permits to order the Youtube videos so that we get in final solid and well-structured training for the user. For that, experts logged on to the platform will post training syllabuses, composed of chapters and lessons. After posting a syllabus, the site makes a search on youtube to get for each lesson of the syllabus the right videos corresponding. Then the matching is realized, and the training newly born is saved on our database. The learner can then consult it, and train himself.

Actors:

- **The user:** This is the person who comes on the site to search for training and follow it
- **The member:** He is a user who proved he is an expert. He can post any training on the site
- **The admin:** He is charged to accept new members
- **The Youtube API:** It gives our site the data of videos

The site pages

- **The authentication pages**
 - **Registration:**

This page permit new users to create an account on the site if they don't already have one
 - **Login:**

This page permit to any user (Learner, Member of Admin) to log in to their account and be directly redirected to the appropriate page if the process succeeds: user, member, and admin are redirected to their own dashboard
- **The landing page:**

This page contains the describing information of the site, his purpose, and permit to search for trainings
- **The training page**

This page describes training. It displays all its information (see the class diagram)
- **The learning page**

This page displays the training syllabus, the different videos belonging to each lesson, the lessons followed by the user, and the ones left
- **The user dashboard**

This page contains the user profile information such as his login, email, profile image, and permits him to modify them. It also displays all the courses the user is following
- **The member dashboard**

This page contains the member profile information such as his login, email, profile image, experience and permits him to modify them. It also displays all the courses the member is following, and the ones he has created
- **The admin dashboard**

Here we have the admin profile information (login, email, password, ...). This page gathers all the admin functionalities, such as user listing, promoting, deleting, demoting, training deletion
- **The donation page**

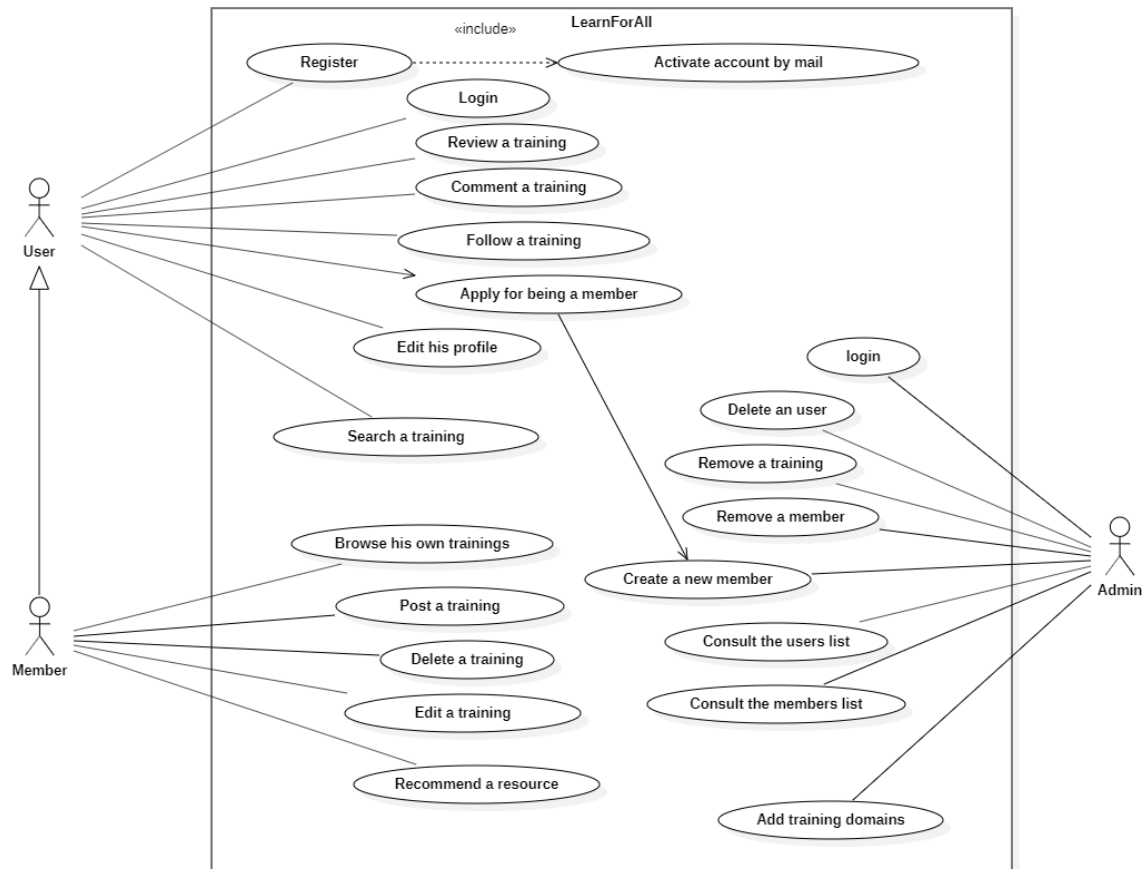
On this page, we present the reason why people may do a donation to this site, and the information they need to do it
- **The content statistics page**

This page is accessible only by members and admins. Here we can see what are the most present subjects, the ones which are less exploited
This page leads to the emptiness page
 - **The emptiness page**

Here we can propose to experts projects on which they can work

The use cases:

The use case diagram:



Textual description:

User use cases

Use case	Register
Actor	User
Use case overview	A user wants to register on the platform
Precondition 1	The user isn't yet registered
Basic flow	The user enters his registration information (email, login, password) and validate the registration
Alternative flow 1	If the registration information already exist on the site, the user enters other information
Alternative flow 2	If the registration encounters an error, the user comes to register after few times

Use case	Login
Actor	User
Use case overview	A user wants to login on his account
Precondition 1	The user is already registered
Basic flow	The user enters his logging information (email or login and password) and validate
Alternative flow 1	If the logging informations don't exists on the site, the user enters other informations

Use case	Rate a training
Actor	User
Use case overview	A user wants to rate a training
Precondition 1	The user is logged
Precondition 2	A training is selected
Basic flow	The user gives a mark (form 0 to 5) to a training he selected

Use case	Comment a training
Actor	User
Use case overview	A user wants to comment a training
Precondition 1	The user is logged
Precondition 2	A training is selected
Basic flow	The user writes a comment and sends it

Use case	Follow a training
Actor	User
Use case overview	A user wants to follow a training that interests him
Precondition 1	The user is logged
Precondition 2	A training is selected
Basic flow	The user clicks on the follow button of the training's page

Use case	Edit his profile
Actor	User
Use case overview	A user wants to follow a training that interests him
Precondition 1	The user is logged
Precondition 2	The user is on his profile page
Basic flow	The user select one or more informations and edit them

Use case	Browse the trainings
Actor	User
Use case overview	A user who need to browse the different trainings in the website
Precondition 1	The user is logged
Precondition 2	The user is on the main page
Basic flow	The user scrolls on the main page to find a training

Use case	Search a training
Actor	User
Use case overview	A user needs to find a particular training on the website, and then uses the search bar to find it
Precondition 1	The user is logged
Precondition 2	The user is on the main page
Basic flow	The user type the training key words in the search bar

Member use cases

Use case	Browse posted trainings
Actor	Member
Use case overview	A member want to see the different trainings he posted on the site
Precondition 1	The member is logged
Precondition 2	The member is on his profile page

Use case	Post a training						
Actor	Member						
Use case overview	A member wants to post a new training on the site						
Precondition 1	The member is logged						
Precondition 2	The member is on his profile page						
Basic flow	<table border="1"> <tr> <td>1</td><td>The member clicks on the “add training” button</td></tr> <tr> <td>2</td><td>The member fills the training adding form</td></tr> <tr> <td>3</td><td>The member validates the form</td></tr> </table>	1	The member clicks on the “add training” button	2	The member fills the training adding form	3	The member validates the form
1	The member clicks on the “add training” button						
2	The member fills the training adding form						
3	The member validates the form						

Use case	Delete a training				
Actor	Member				
Use case overview	A member wants to delete a training he posted				
Precondition 1	The member is logged				
Precondition 2	The member is on the training’s page				
Precondition 3	The member is the training’s owner				
Basic flow	<table border="1"> <tr> <td>1</td><td>The member clicks on the delete button</td></tr> <tr> <td>2</td><td>The member confirms the deletion</td></tr> </table>	1	The member clicks on the delete button	2	The member confirms the deletion
1	The member clicks on the delete button				
2	The member confirms the deletion				

Use case	Edit a training						
Actor	Member						
Use case overview	A member wants to modify a training he posted						
Precondition 1	The member is logged						
Precondition 2	The member is on the training's page						
Basic flow	<table border="1"> <tr> <td>1</td><td>The member clicks on the "modify training" button</td></tr> <tr> <td>2</td><td>The member fills the training form</td></tr> <tr> <td>3</td><td>The member validates the form</td></tr> </table>	1	The member clicks on the "modify training" button	2	The member fills the training form	3	The member validates the form
1	The member clicks on the "modify training" button						
2	The member fills the training form						
3	The member validates the form						

Use case	Post a training				
Actor	Member				
Use case overview	A member wants to propose a resource for a lesson of his syllabus				
Precondition 1	The member is logged				
Precondition 2	The member is on the training adding form				
Basic flow	<table border="1"> <tr> <td>1</td><td>The member select a lesson of his training</td></tr> <tr> <td>2</td><td>The member inserts the resource link</td></tr> </table>	1	The member select a lesson of his training	2	The member inserts the resource link
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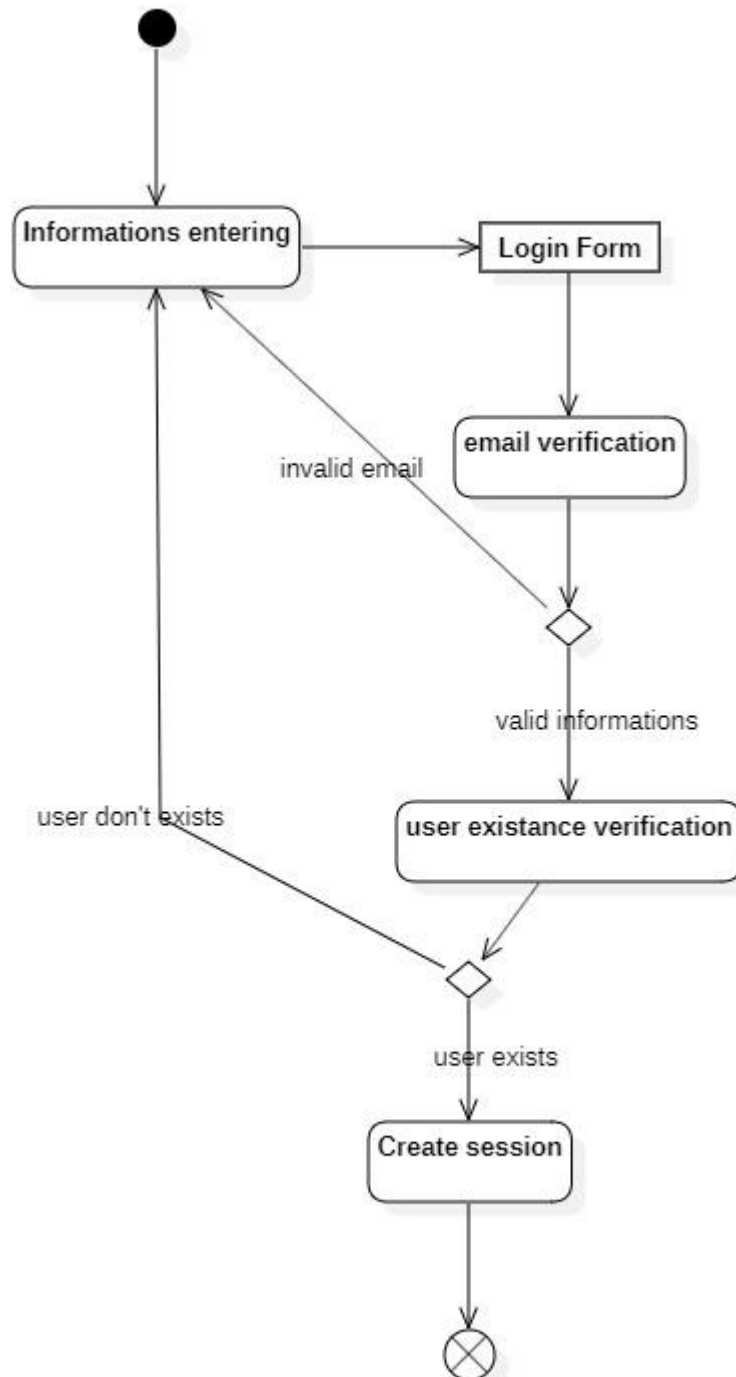
Admin use cases

Use case	Login
Actor	Admin
Use case overview	An admin wants to login on the admin account
Precondition 1	The user is already registered
Basic flow	The user enters his logging in information (email or login and password) and validate
Alternative flow 1	If the logging in informations don't exists on the site, the user enters other informations

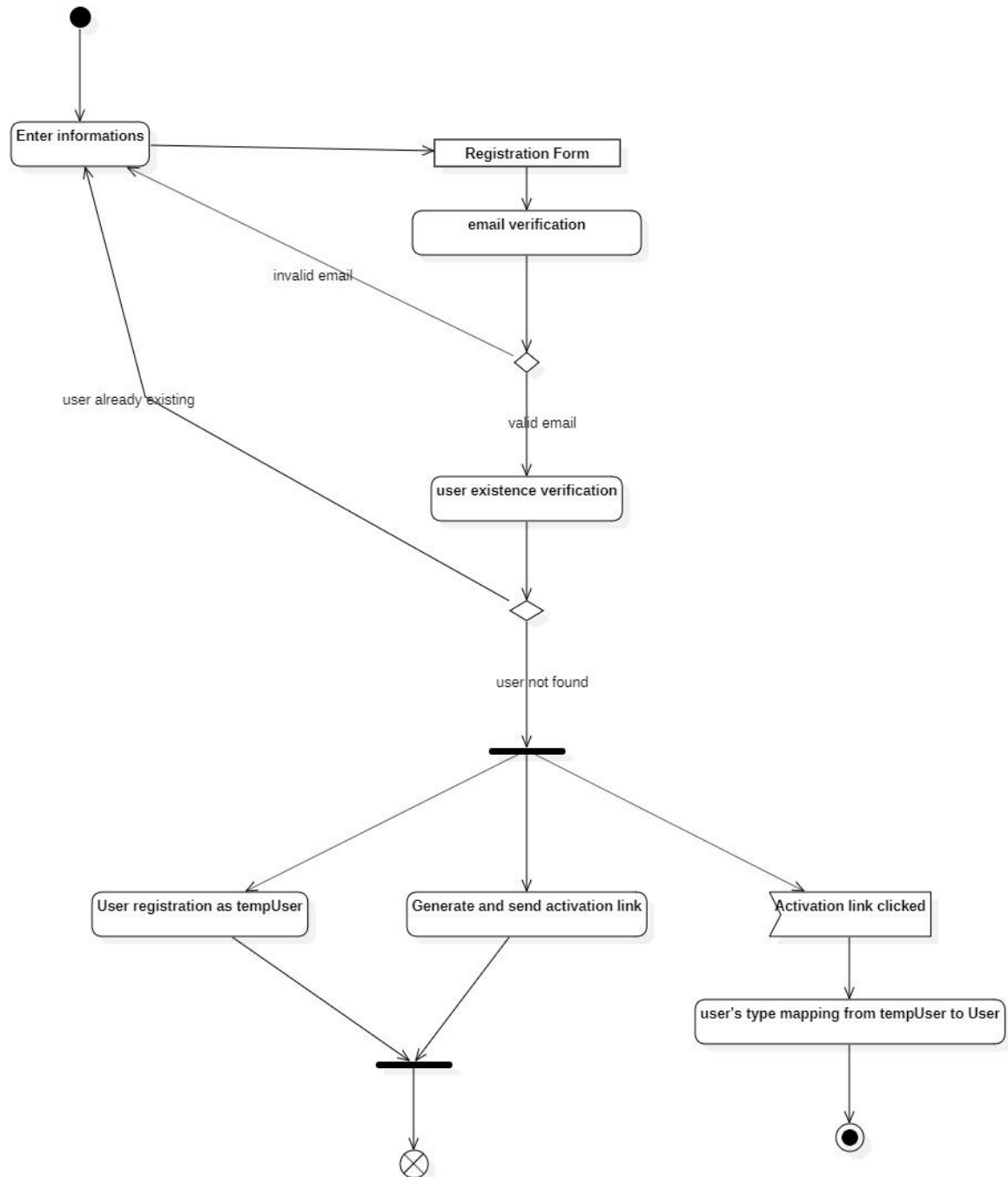
Use case	Create a new member
Actor	Admin
Use case overview	The admin has to determine if a user who applied to be a member fills the required criterions
Precondition 1	The admin is logged
Basic flow	The admin consult the application form and validates his application
Alternative flow 1	If the user doesn't fill the criteria, the admin refuses the graduation

Diagrams

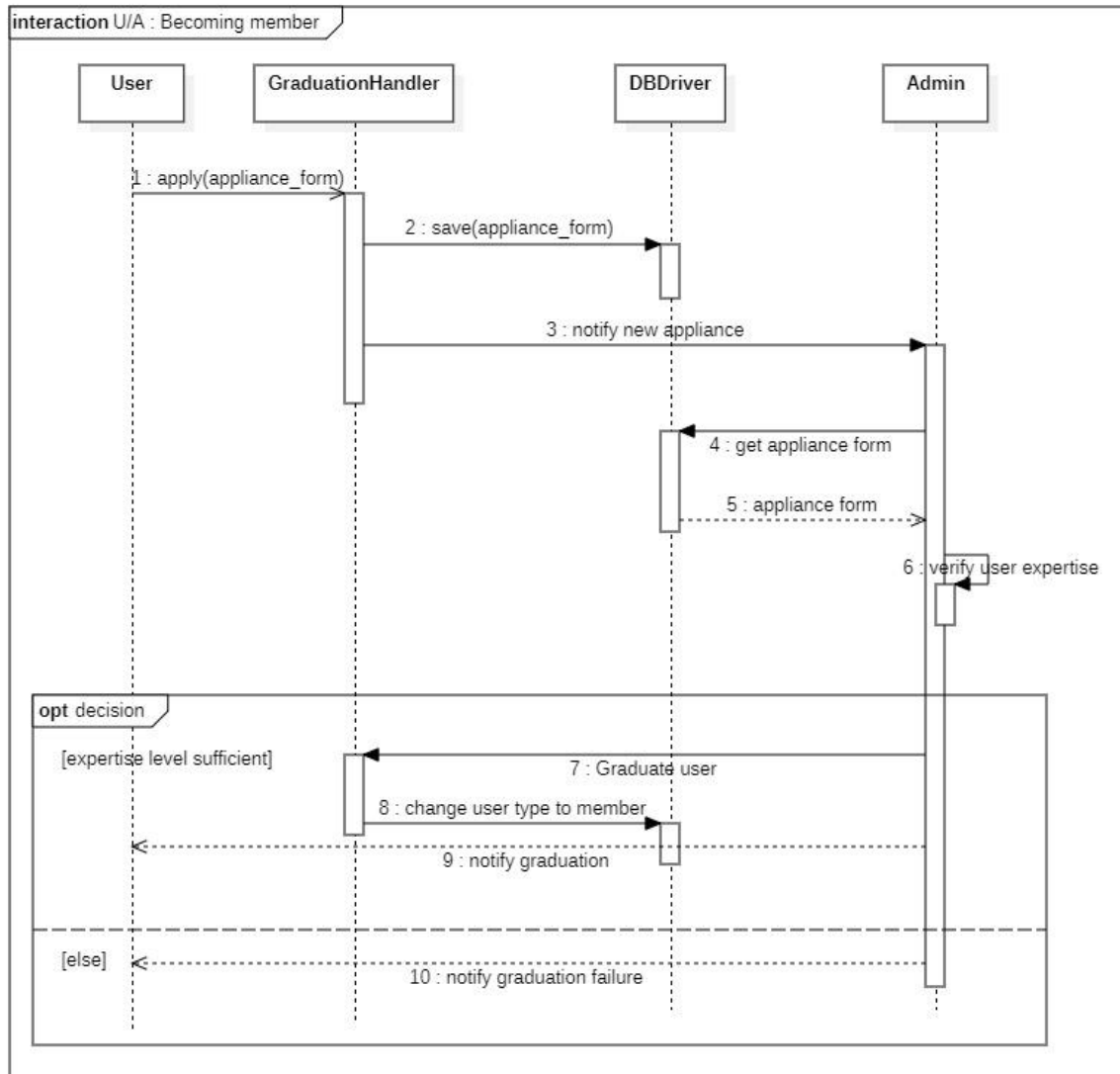
- User: login activity diagram



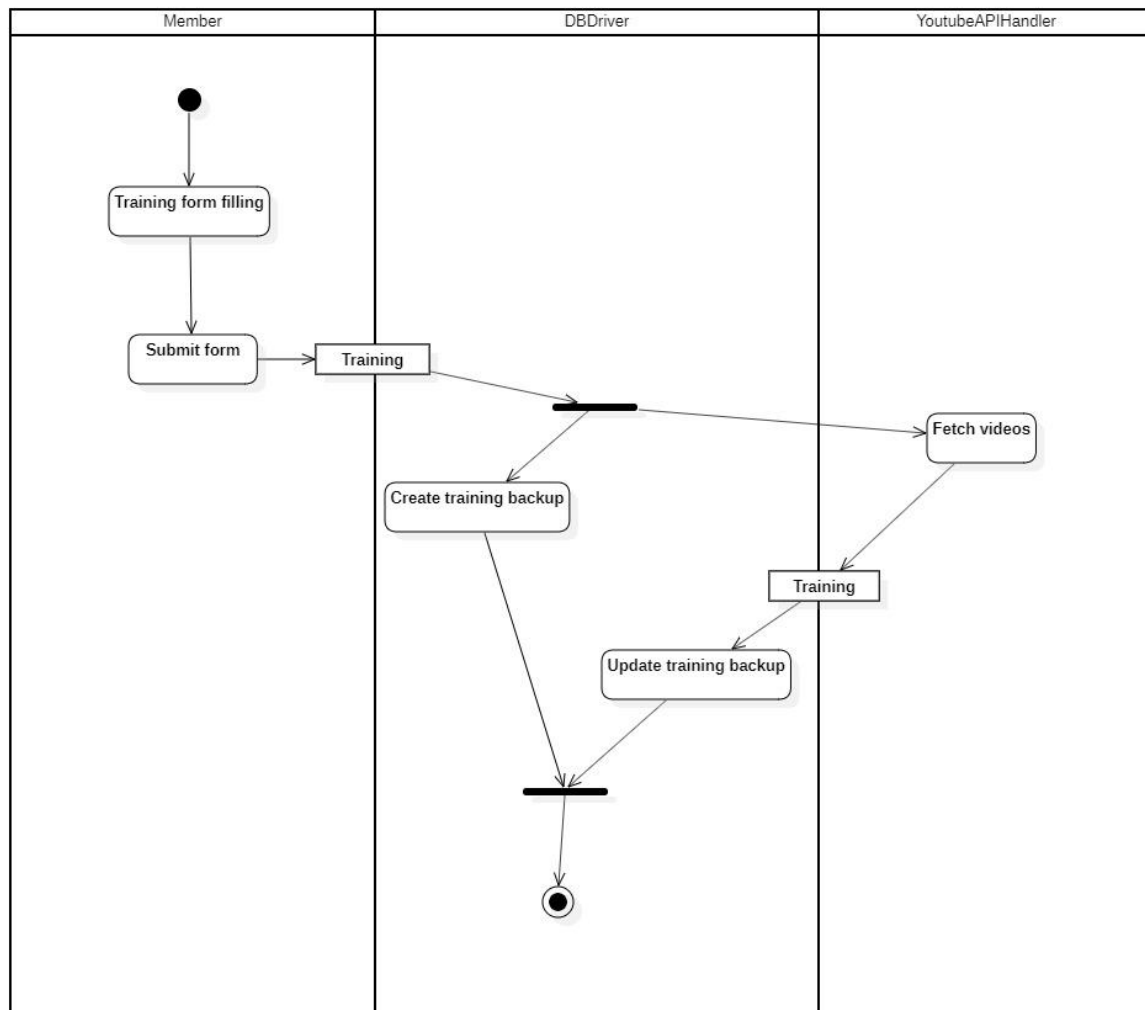
- User: register activity diagram



- **User/Admin: Becoming member sequence diagram**



- Member: Post a training activity diagram



- System class diagram

