

# Final Project Detailed Instructions

## Overview

### 1 Software Requirement Specification

Structure:

#### 1. Introduction

##### 1. (Aim of the document):

This is an introduction document for our project called "TorVergHub".

##### 2. (Overview of the defined system):

Our project, called "TorVergHub", is meant to be a support platform for students, especially students from TorVergata university.

TorVergHub provides several functions useful for students such as:

- the possibility to share and rank didactic material.
  - a service of notifications for every professor's webpage.
  - a platform to help users with their working groups.
- and other less important functions.

##### 3. Operational settings:

The system has been developed and tested on Windows 10 and MacOs for a desktop fruition. Since it has not been developed with a mobile usage in mind, no adjustment to the layout for mobile visualization has been made.

It has been programmed in Java jdk 8, using javafx for the desktop program GUI and a mix of html and css for the browser one.

The intended target are students in Rome who actively attend the university of TorVergata.

##### 4. Related systems (at least 2), Pros and Cons.

###### a) YouMath.

YouMath is a website where users can ask questions about math and read other users' questions.

YouMath also provides solved exercises about a topic with a little explanation of the theoretical aspect of that topic.

Unlike YouMath, our website provides several didactic materials (and not just one) for every topic.

Also, every didactic material in our website is ranked by users, so a user can choose a didactic material among the others.

Another difference is that while every student from high school or university could use YouMath, our website is specifically aimed at TorVergata students.

This means that YouMath is very generic (it has few materials for a lot of topics).

On the other hand, our website is very specific (it has several materials, but only about topics related to our courses).

Furthermore, our website provides functions that YouMath does not.

###### b) Google Groups.

Google Groups is a service that allows users to create discussions and that manages them as threads.

Its main strong points are its integration in the Google ecosystem and the massive archive of

groups it has accumulated via its Usenet groups integration.

Our system does not have such benefits, but its advantage is once again its being tailored to a very specific niche.

This means that we understand the problems and needs of our userbase and can consequently serve them better than a general system.

We know, for instance, that our users will probably need to work on a repository or on a cloud-based drive.

We can then adapt the group's interface to highlight these specific needs while Google Groups, that serves a general public, cannot.

## 2. User Stories (3 per member)

Adriano Trani:

- 1) As a user, I want to create a post, so that I can ask questions.
- 2) As a user, I want to sort and filter the list of didactic material\*, so that I can find what I am looking for.
- 3) As a user, I want to find solved exercises about a topic, so that I can study that topic.

Danilo D'Amico:

- 1) As a user, I want to know when a professor has published something on their website, so that I can read it as soon as it happens.
- 2) As a user, I want a gamification system, so that I am more motivated to post and share content.
- 3) As a moderator, I want an automated flag system, so I can lighten my workload.

Gabriele Anselmi:

- 1) As a user, I want to make reviews of the training material, so that I can recommend it to other users.
- 2) As a user, I want to earn points by the reviews of training material, so that I can go up in user's ranking.
- 3) As a student user, I want to know which bus is suggested at the end of any lesson, so that I can get home in the shortest possible time.

## 3. Functional Requirements (3 per member)

Adriano Trani:

- 1) The system shall allow the ranking of didactic material\* to registered users only.
- 2) The system shall allow the sorting of didactic material\* by "most used", "highest rated" and "most recent".
- 3) The system shall store the user's personal data (e.g. username, password) in an encrypted database.

Danilo D'Amico:

- 1) The system shall add a point to a user's score each time someone upvotes one of their

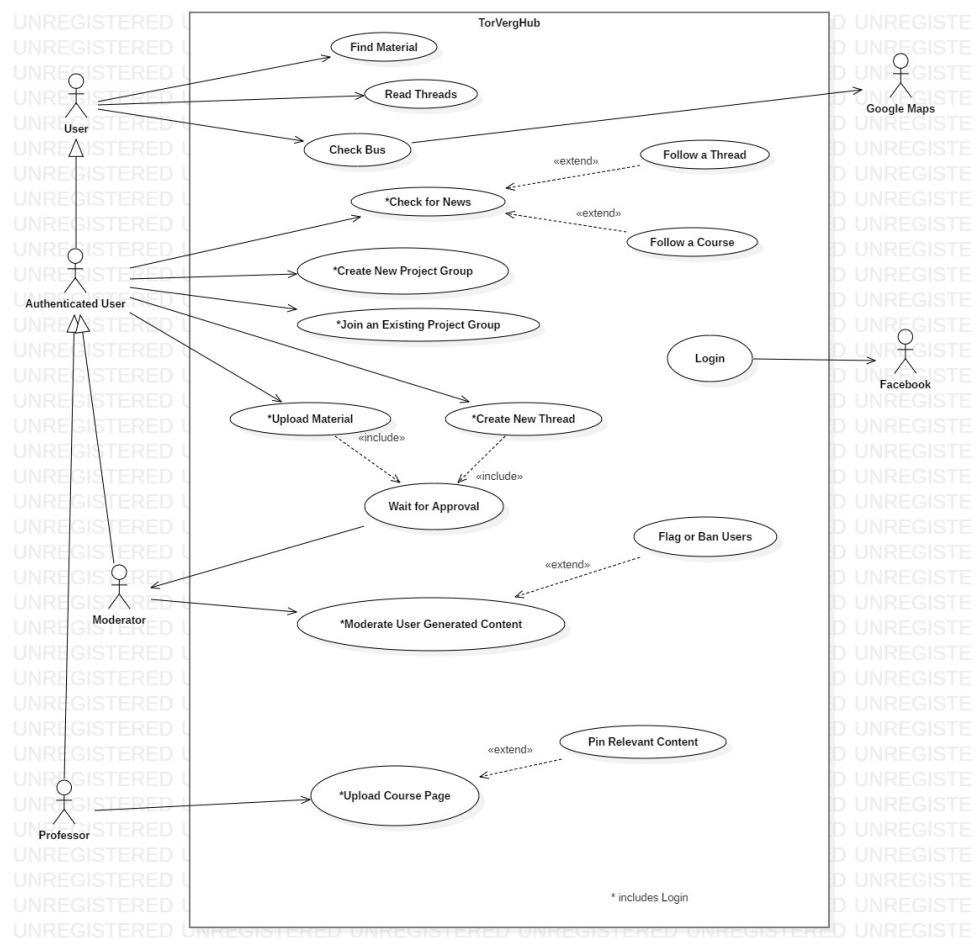
threads.

- 2) The system shall provide a form for users to report failures.
- 3) The system shall notify the user with an email in case of changes in the code of a website they have under “controlled”.

Gabriele Anselmi:

- 1) The system shall provide a way to make reviews about the training material on the website.
- 2) The system shall allow the user to download training material shared by other users for free.
- 3) The system shall provide suggestion on which bus to take at the end of any lesson to get home in the shortest possible time.

## 5. Use Cases: Overview Diagram (1)



## 2 Storyboards

Gabriele Anselmi:

The screenshot shows the homepage of the TorVergHUB website. At the top, there is a navigation bar with links for Home, Find material, Upload material, Questions, Support, FAQ, Login, and Sign Up. Below the navigation bar, the word "HOME" is prominently displayed in red. A yellow banner contains the quote "Ogni volta che impariamo qualcosa di nuovo, noi stessi diventiamo qualcosa di nuovo". The main content area features a box titled "About us" which contains text about the site's purpose, user interaction, and support. Below this, there are two boxes: one listing services like Find material, Check bus, Courses info, Questions, FAQ, and Support; and another for logging in with E-mail, Password, or social media (Delphi, Facebook, Google).

**HOME**

**"Ogni volta che impariamo qualcosa di nuovo, noi stessi diventiamo qualcosa di nuovo"**

**About us**

Ti è mai capitato di avere difficoltà nel trovare appunti, libri, file, documenti o strumenti utili per lo studio? Questo sito vuole aiutare l'utente a studiare in modo più comodo e rapido, fornendo materiale di formazione o indirizzando a materiale di supporto esterno.

L'utente può visualizzare sul sito il materiale e, se vuole, può scaricarlo. Inoltre può condividere le proprie conoscenze e i propri appunti, i quali possono essere recensiti da altri utenti. Con le recensioni si ottengono punteggi che fanno crescere il ranking dell'utente, il quale può scalare la classifica e salire di livello, fino ad ottenere il titolo di "Studente Modello". Questo sistema può incentivare lo studente a prendere appunti a lezione e condividerli con la community universitaria, costruendo così un luogo di condivisione e confronto utile a migliorare lo studio.

Il servizio è totalmente gratuito perché il materiale condiviso è frutto dell'esperienza e della conoscenza degli utenti e può non essere verificato, quindi potrebbe contenere alcuni errori, che chiunque, se volesse, può segnalare scrivendoci nella pagina **Support**. Si accettano anche suggerimenti e miglioramenti!

Grazie e BUONO STUDIO!!!!

**Find material**    **Questions**  
**Check bus**    **FAQ**  
**Courses info**    **Support**

**Login**

E-mail     Password   
Or

[☰ TorVergHUB](#) [Home](#) [Find material](#) [Upload material](#) [Questions](#) [Support](#) [FAQ](#) [+ My profile](#) 

[Search:](#)

- + [Courses info](#)
- + [News](#)
- [Favourite](#)
- [Favourite Material](#)
- 
- + [Courses list](#)
- + [Groups](#)
- + [Create new entry](#)
- + [Check bus](#)

## MY PROFILE

[!\[\]\(c1c13e32f5099222ca8eb2c0edc64160\_img.jpg\) Settings](#) [!\[\]\(4d11ca7b3fd6face42df5840f6181c44\_img.jpg\) Logout](#)

### Goldrake (user)

**Info:**

**City:** Roma  
**Province:** Rm  
**Address:** Via Fleed, 10  
**University:** Roma Tor Vergata  
**Study course:** Ingegneria Informatica  
**Specialization:** Sistemi software e Web  
**Academic year:** 3



**Stats:**

**Displayed files:** 5  
**Downloaded files:** 1  
**Uploaded files:** 4  
**UPvoted:** 3  
**Received UPvote:** 2

**Ranking:**

1° Goldrake	PT 15	<a href="#">View more</a>
2° Jeeg Robot	PT 10	
3° Mazinga	PT 7	
...	...	
28° Lupin	PT 2	
29° Goku	PT 2	
...	...	

Adriano Trani:

**TorVergHUB** Find material Upload material Questions Support FAQ My profile

## FIND MATERIAL

**Search results:**

Videolez. A.M.  UPvote: 121	Appunti di A.M.  UPvote: 99	Appunti prof. B.  UPvote: 50
Esercizi di A.M.  UPvote: 35	Videolez. pro. I.  UPvote: 30	

**Search settings:**

Topic:

Course:

**Filter the results:**

Recommended texts  
 PDF  
 Video lessons

**Sort the results:**

Number of UPvote  
 Type of material

**Display:**  
Only the first  results

**Search**

## QUESTIONS

### Search results:

[CLOSED] Che programma usare?

<premessa alla domanda>

#Comments: 12

Expand

Comment



[OPENED] Come configurare V.M?

<premessa alla domanda>

#Comments: 12

Expand



Comment



### Search settings:

Topic:

#### Filter the results:

- Opened post
- Resolved post

#### Sort the results:

- Number of Comments
- Creation date

#### Display:

Only the first  results

Search

Danilo D'Amico:

**TorVergHUB** [Find material](#) [Upload material](#) [Questions](#) [Support](#) [FAQ](#) [+ My profile](#)

Search:

- + [Courses info](#)
- + [News](#)
- [Favourite](#)
- + [Favourite Material](#)
- [Courses list](#)
  - ^ ["ISPW"](#)
- + [Groups](#)
- + [Create new entry](#)
- + [Check bus](#)

## COURSE PAGE: ISPW

**Professors:** F.  
D. A.

**Info:**

**Seat:** Ingegneria

**Classroom:** 3 (Mon), A1 (Wed, Fri)

**Study course:** Computer Engineering

**Year, Semester:** 3, I°

**To go home:**

**Fixed material:**

<[Mailing list](#)>

<[Linea IBS al libro consigliato](#)>

[CLOSED] Che differenza c'è tra Factory Method e Hostrect Factory? [Expand](#)

**View other material:**

Il giorno 28/10 la lezione sarà tenuta dal Prof. F.

Nuovo Homework assegnato. Controllate le vostre mail

 **TorVergHUB**  Home  Find material  Upload material  Questions  Support  FAQ  My profile 

Search:

+  Courses info  
+  News  
+  Favourite  
+  Create new entry  
+  Check bus

## CREATE NEW ENTRY

Create new working group  
 Create new thread

**Enter:**

GroupName\*:

Course\*:

Drive Link:

Repository:

Add Member:

Add a brief description:   
0/280

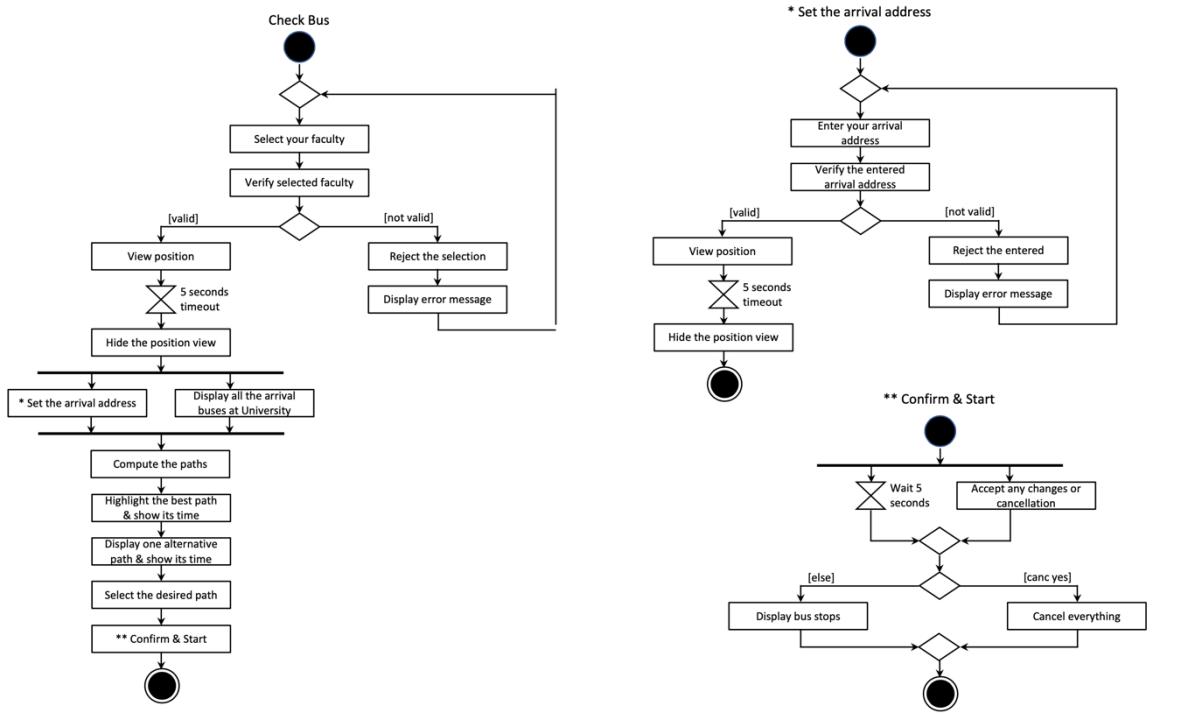
Public  
 Private

\* entries with an asterisk are mandatory Confirm

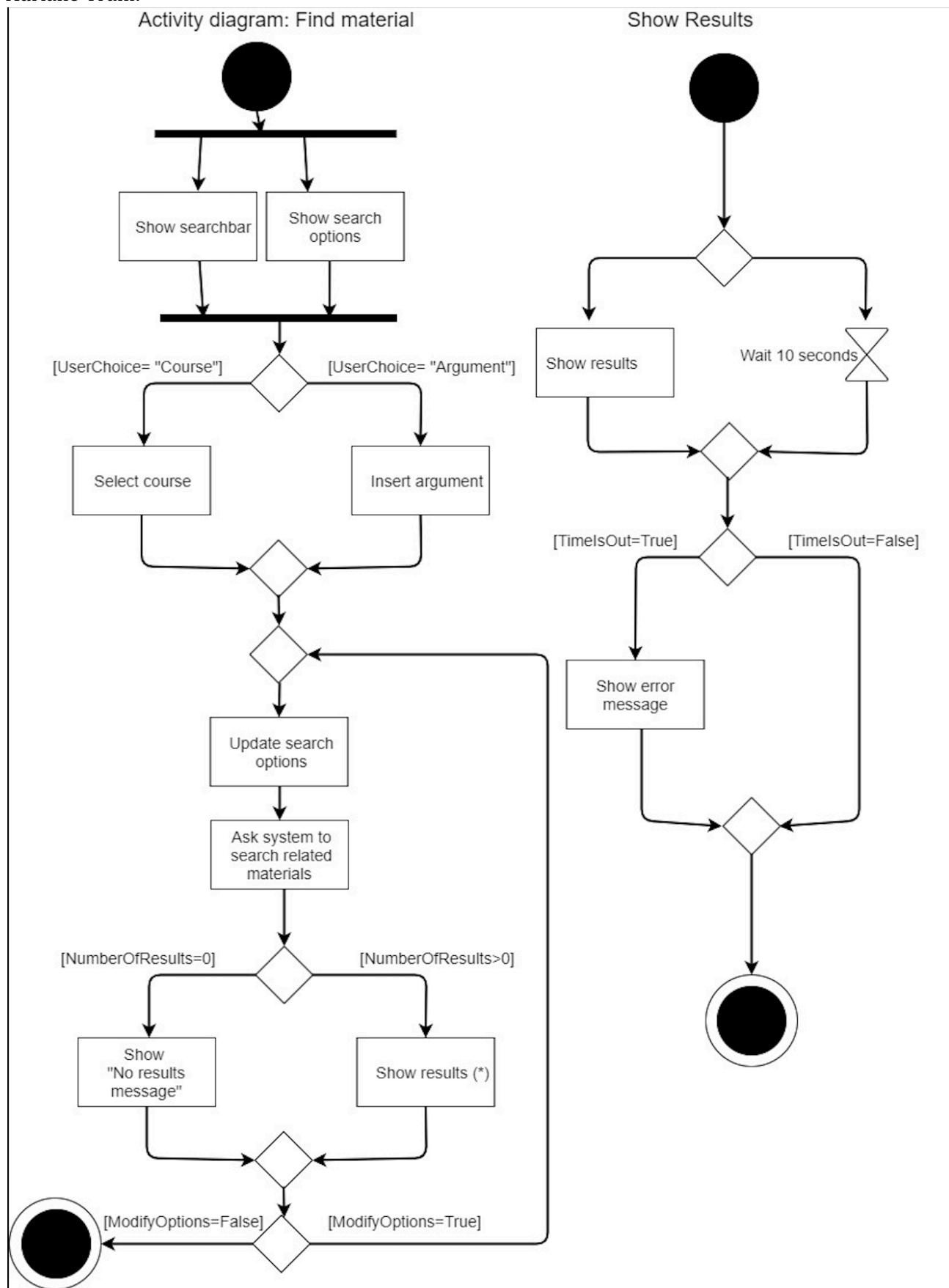
### 3 Design

- Activity diagram:

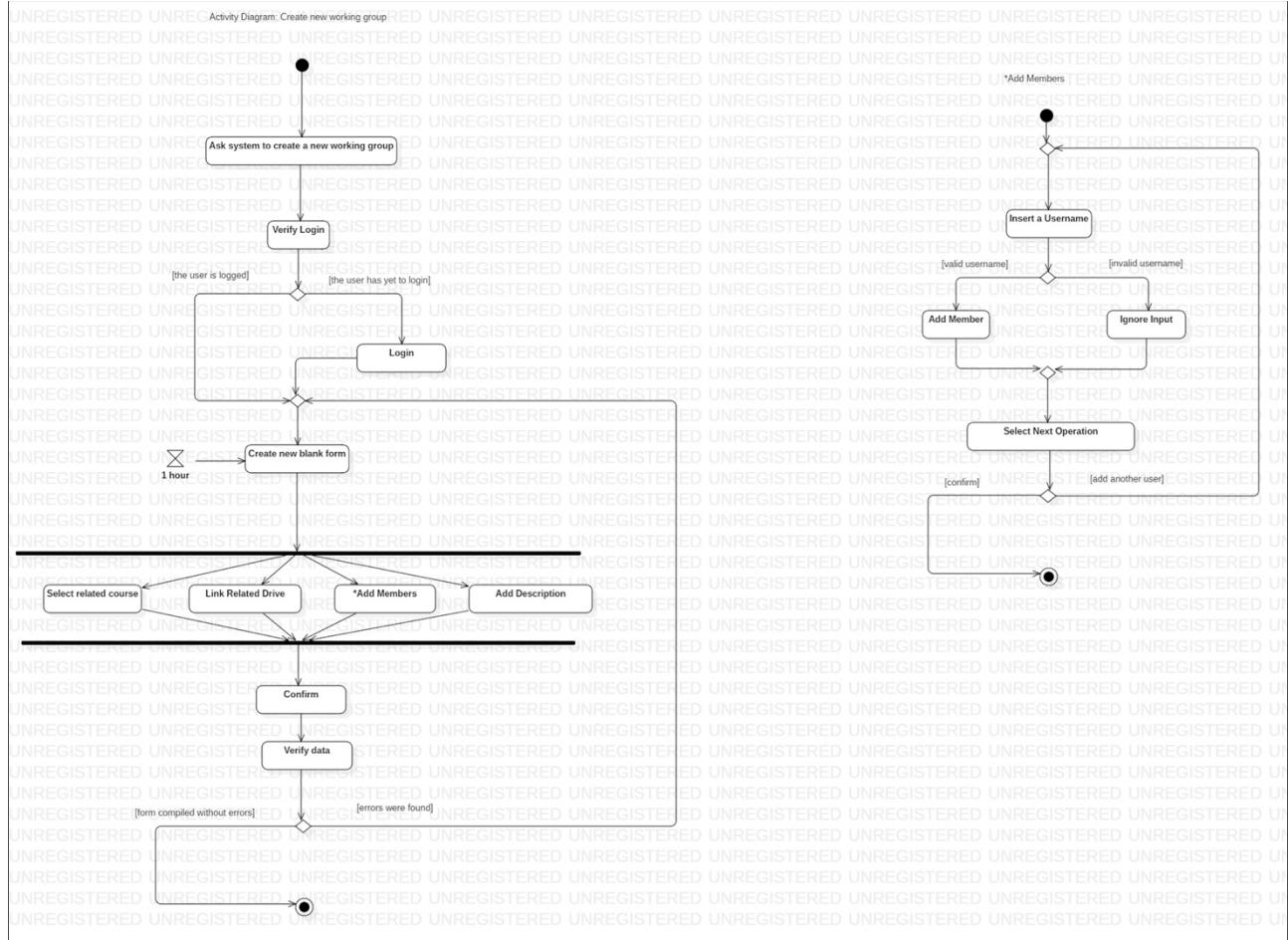
Gabriele Anselmi:



Adriano Trani:



Danilo D'Amico:



## 5 Code

Github: <https://github.com/GabryLele98/TorVergHub>

Travis: <https://travis-ci.org/GabryLele98/TorVergHub>

SonarCloud: [https://sonarcloud.io/dashboard?id=gabrylele98\\_TorVergHub](https://sonarcloud.io/dashboard?id=gabrylele98_TorVergHub)