



User Manual

Sons Of SWE - Project Marvin

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Informations about the manual

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Redaction	Cavallin Giovanni Panozzo Stefano
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Description

This document is the user manual of the Project Marvin



Diary of changes

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1.0.0	2018-06-07	Approval	Thiella Eleonora	<i>Project responsible</i>
0.2.0	2018-06-06	Verification	Favero Andrea	<i>Verifier</i>
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1 Introduction

This is the user manual of **Marvin**, a Dapp ran on the EVM, that shapes a subset of **Uniweb** functionalities. Uniweb is the University of Padua's informative system. It allows students to keep track of their academic carrier. Professors use Uniweb to see the lists of students that are registered to their exams and, see the exams to which they have been assigned.

More precisely:

A student will be able to:

- Accept or refuse a mark;
- Visualize his/her school records;
- Subscribe to an exam.

A professor will be able to:

- Visualize the exams to which he/her has been assigned;
- See the students registered to his/her exams.

The university and the administrators will be able to add, eliminate and modify:

- Academic years;
- Degree courses;
- Didactic activities;
- Exams;
- Users.

To use Marvin you need to install **MetaMask** to directly execute the Dapp on your browser.

All the users have to be logged through Metamask.

2 Installation

WARNING: This section is not complete. It will be completed when we implement all the features in the program

2.1 Requirements

- Mozilla Firefox version 50 or more
- Google Chrome version 60 or more

2.2 Metamask installation and configuration

Go to the site <https://metamask.io>.

If you're using Firefox, you will see a link named **GET FIREFOX ADDON**, click on it. Then click **Add to Firefox** and then click **Add** on the pop-up.

If you're using Chrome, you will see a link named **GET CHROME EXTENSION**, click on it. Then click **Add** and then click **Add extension** on the pop-up.

Now in the browser: click on the MetaMask icon on the top right and accept the Privacy Notice and the Terms of use by clicking on **Accept**.



2.3 Creation of a digital wallet

Insert a new password (it is needed to unlock the account) and click **CREATE** (as in Figure 1).

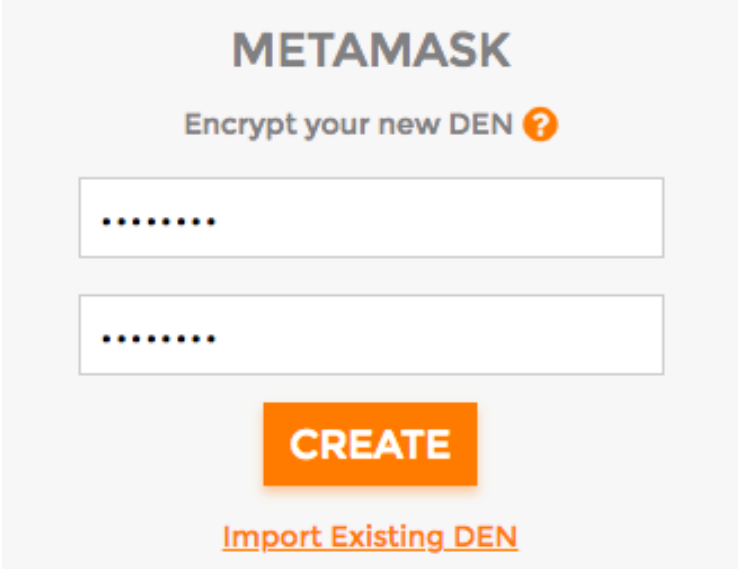
The image shows the Metamask password creation interface. At the top, the word "METAMASK" is displayed in a bold, sans-serif font. Below it, the text "Encrypt your new DEN" is shown with a small orange question mark icon. There are two input fields for a password, each containing a series of dots. Below the input fields is a large orange button with the word "CREATE" in white. At the bottom, there is a link that says "Import Existing DEN" in orange text.

Figure 1: Setting the password

Now store somewhere on your drive the 12 words seed phrase (an example of seed phrase is showed in Figure 2).

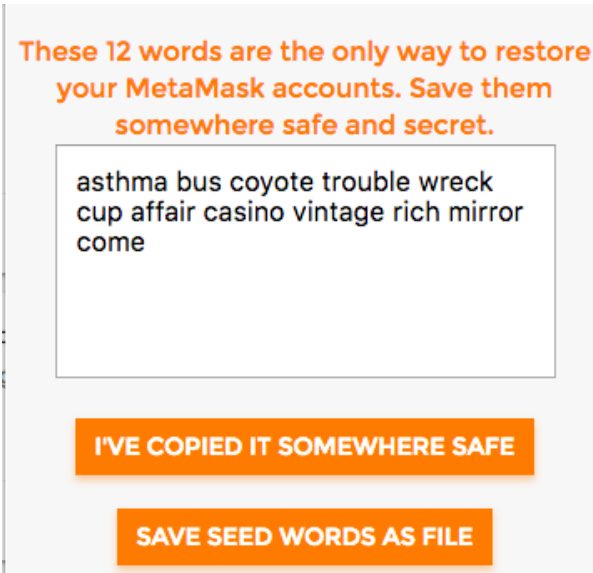
The image shows the Metamask seed phrase screen. At the top, there is a warning in orange text: "These 12 words are the only way to restore your MetaMask accounts. Save them somewhere safe and secret." Below this warning is a box containing a 12-word seed phrase: "asthma bus coyote trouble wreck cup affair casino vintage rich mirror come". At the bottom, there are two orange buttons: "I'VE COPIED IT SOMEWHERE SAFE" and "SAVE SEED WORDS AS FILE".

Figure 2: The seed phrase

2.4 Restore the digital wallet

You have the possibility to restore your account if you loose the password or change the browser or even the computer. The only thing you need to do is to click on the Metamask icon and then click on **Restore**



from seed phrase. Now paste inside the box the seed phrase that you have saved previously, insert a new password and click **OK**.

2.5 Connection to the application

This feature has not been implemented yet

Now you're able to use Marvin!

3 University

WARNING: This section is not complete. It will be completed when we implement all the features in the program

After the login you will be redirected to the page represented in Figure 3. As you can see, a black bar has appeared near the top of the screen. The black bar contains on its left the voices **Academic Years**, **Degree Courses** and **Didactic activities**. On the right it contains the voices **Administrators**, **Professors** and **Students**. The voices on the right allows the university to manage (create, visualize and delete) administrators, professors and students.

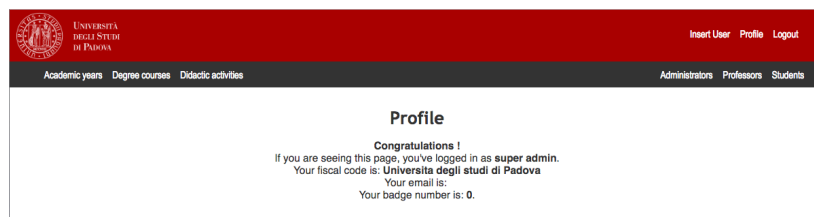


Figure 3: Login with University

3.1 Academic years

By clicking on the **Academic years** voice in the menu, you will see (as in Figure 4) a register of all the academic years inserted in the system. For each academic year you can *insert a degree course*, *modify the name of the academic year* and *delete the academic year*.

Academic years				
Here there is the list of the academic years.				
Insert academic year				
Year	Degree course			
Academic year 2017-2018	Insert degree course	Modify	Delete	
Academic year 2016-2017	Insert degree course	Modify	Delete	
Academic year 2015-2016	Insert degree course	Modify	Delete	

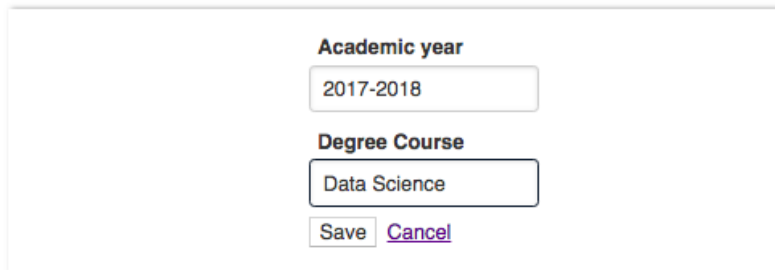
Figure 4: Register of the the academic years registered in the system.

3.1.1 Insertion of a degree course

Click on **Insert degree course**, you will be redirected to a page (like the one in Figure 5), insert the name of the degree course that you want to add and click the **save** button.

Insert degree course

Now you can insert a new degree course.



The form contains two input fields. The first is labeled 'Academic year' and contains the text '2017-2018'. The second is labeled 'Degree Course' and contains the text 'Data Science'. Below the fields are two buttons: 'Save' and 'Cancel'.

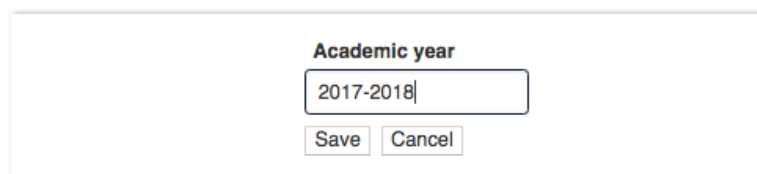
Figure 5: Insertion of a degree course.

3.1.2 Modify the name of the academic year

Click on the button **Modify**, you will be redirected to a page like the one in Figure 6, change the name of the academic year and click the **save** button.

Modify academic year

Now you can modify this academic year.



The form contains one input field labeled 'Academic year' with the text '2017-2018' and a cursor at the end. Below the field are two buttons: 'Save' and 'Cancel'.

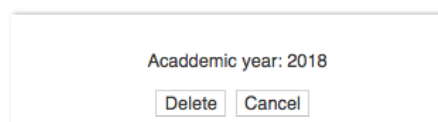
Figure 6: Modification of an academic year.

3.1.3 Elimination of an academic year

Click on the button **Delete**, you will be redirected to a page (like the one in Figure 7) and click the **Delete** button to confirm the elimination.

Delete academic year

Are you sure you want to delete this academic year? Once you canceled it, you can't go back.



The form displays the text 'Academic year: 2018'. Below it are two buttons: 'Delete' and 'Cancel'.

Figure 7: Elimination of an academic year.

3.2 Degree courses

By clicking on the **Degree courses** voice in the menu, you will see (as in Figure 8) a register of all the academic years inserted in the system for a specific academic year. For each degree course you can *insert a didactic activity*, *modify the name of the degree* and *delete it*.

Degree courses

Here there is the list of the degree courses.

Select academic year

2017-2018 ▾

Insert degree course

Year	Degree course	Didactic activity			
Academic year 2017-2018	Informatica	Insert didactic activity	Modify	Delete	
Academic year 2017-2018	Matematica	Insert didactic activity	Modify	Delete	
Academic year 2017-2018	Psicologia	Insert didactic activity	Modify	Delete	
Academic year 2017-2018	Ingegneria dell'energia	Insert didactic activity	Modify	Delete	
Academic year 2017-2018	Giurisprudenza	Insert didactic activity	Modify	Delete	

Figure 8: Register of the admins in the system.

3.2.1 Insert a didactic activity

Click on the link **Insert didactic activity**, you will be redirected to a page like the one in Figure 9. You can insert the name of the activity, and also *insert an exam* related to it by clicking on the link **Insert an exam**.

Insert didactic activity

Now you can insert a new didactic activity.

Academic year

Insert a year

Degree Course

Insert a degree course

Didactic activity

Insert a didactic activit

[Insert an exam](#)

Save

Cancel

Figure 9: Insertion of a didactic activity.

3.2.2 Modify the name of a degree

Click on the button **Modify**, you will be redirected to a page like the one in Figure 10, change the name of the degree and click the **save** button.

Modify degree course

Now you can modify this degree course.

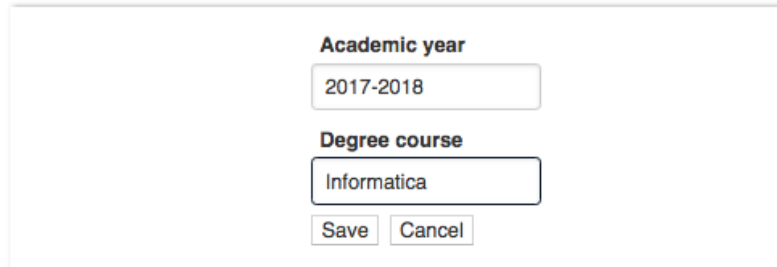


Figure 10: Modification of a degree.

3.2.3 Delete a degree

Click on the link **Insert didactic activity**, you will be redirected to a page (like the one in Figure 11). You can insert the name of the activity, and also *insert an exam* related to it by clicking on the link **Insert an exam**.

Delete degree course

Are you sure you want to delete this degree course? Once you canceled it, you can't go back.

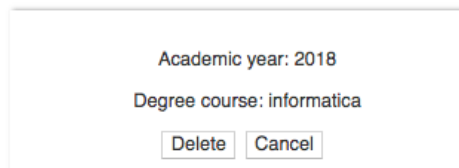


Figure 11: Elimination of a degree.

3.3 Didactic activities

This feature has not been implemented yet

3.3.1 Insert an exam

This feature has not been implemented yet

3.3.2 Modify a didactic activity

This feature has not been implemented yet

3.3.3 Delete a didactic activity

This feature has not been implemented yet

3.4 Administrators, Professors and Students management

When you choose one of those three categories, you will see (as in Figure 12) a register of all its users listed by their name, surname, badge number, fiscal code and univocal code. You can choose to eliminate one of the listed users simply by clicking on the delete button corresponding to the user.

Administrators					
Here there is the list of the administrators.					
Insert an administrator					
Name	Surname	Badge number	Fiscal code	Univocal code	
Mario	Rossi	3547385	12g324hgl4cf3	124356456	Delete

Figure 12: Register of the admins in the system.

4 Administrators

An administrator has the same privileges of the university user but he can't create new administrator users.

5 User insertion

Only the university and the admins can create new users.

Inserting a user in the system is an operation that has two phases:

- The first one requires that the university (or an admin) creates a new account in the system inserting the fiscal code of the user and an unique code (as in Figure 13);

Insert user

Universita degli studi di Padova, now you can add a user.

Fiscal Code

This is a required field.

Unique code

This is a required field.

User type

☐ Administrator
☐ Professor
☒ Student

This is a required field.

[Insert new user](#)

Figure 13: User insertion by an admin or university

- The second one is necessary to authenticate and identify the new user: in fact, the new user during the Sign Up will have to insert its own Fiscal Code and the Identification Code issued by the university (or an admin), and other data as in Figure 14. If this two data (Fiscal Code and Identification Code) are the same as those inserted by the University (or an admin), then all the user's personal data will



be saved and its Metamask address connected to the account, so that the next logins can be made automatically. If the form has been filled correctly, than a Metamask window will be opened in front of you. Confirm clicking the **SUBMIT** button.

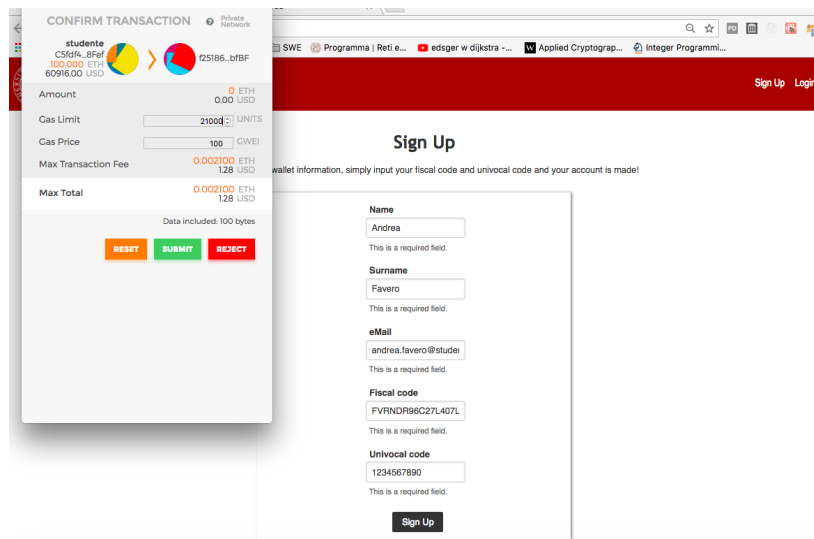


Figure 14: User Sign Up

6 Professors

After the login you will notice that a black bar has appeared near the top of the screen. The black bar contains on its left the voice **Exams list**.

If you click on that voice, you will be redirected to a page (similar to the one in Figure 15) that shows you the exams associated to you.

Exams list			
Exams associated to you			
Here there are the list of exams associated to you			
Degree Course	Didactic Activity	Typology	Date
informatica	Analisi	scritto	20-06-2018
informatica	Analisi	orale	22-06-2018
informatica	Calcolo numerico	scritto	28-07-2018
informatica	Calcolo numerico	laboratorio	01-08-2018
Ingegneria	Calcolo numerico	scritto	25-07-2018
Ingegneria	Calcolo numerico	laboratorio	27-08-2018

Figure 15: List of exams associated with the logged professor

7 Students

WARNING: This section is not complete. It will be completed when we implement all the features in the program

After the login you will notice that a black bar has appeared near the top of the screen. The black bar contains on its left the voices **Yours exams list** and **School records**.

7.1 Visualize the exams list

To see your exams list click on the voice **Yours exams list**, you will be redirected to a page (similar to the one in Figure 16) that shows the exam to which you can register and to which you are already registered.

Your exams list. School records			
Exams to which you can register			
Here there are the list of your exams			
Degree Course	Didactic Activity	Typology	Date
informatica	Probabilità	orale	20-06-2018
informatica	Programmazione	scritto	11-06-2018
informatica	Analisi	laboratorio	28-07-2018
informatica	Algoritmi	orale	9-08-2018
informatica	Sistemi operativi	scritto	25-07-2018
informatica	Ricarca operativa	scritto	19-08-2018
Exams list to which you are already registered			
Here there are the list of the exams to which you are already registered			
Degree Course	Didactic Activities	Typology	Date
informatica	Probabilità	orale	20-06-2018
informatica	Programmazione	scritto	11-06-2018
informatica	Analisi	laboratorio	28-07-2018
informatica	Algoritmi	orale	9-08-2018
informatica	Sistemi operativi	scritto	25-07-2018
informatica	Ricarca operativa	scritto	19-08-2018

Figure 16: List of exams to which the student can register and to which is already registered.

7.2 Visualize the school records

If you want to visualize the exams that you have already passed click on the voice **School records**, you will be redirected to a page (similar to the one in Figure 17) that shows all the exams that you can take. If the cells of the column named *status* are green, then you have passed those exam, otherwise you have not, in this way, you have a direct feedback regarding your university career.

Your exams list. School records			
School records			
Here there is your school records with the exams that you've already passed			
Didactic Activity	Status	Date	Vote
Probabilità	Green	10-06-2017	28
Programmazione	Green		
Analisi	Green	17-01-2017	24
Algoritmi	Green	22-09-2016	19
Sistemi operativabilità	Green		
Ricarca operativa	Green	04-07-2017	30

Figure 17: List of the exams that the student has passed (status cell in green) and hasn't passed (status cell in yellow)

8 Problems with the software

Marvin isn't yet stable, so it is very likely that it contains errors. You can report malfunctions to sonsofswe.swe@gmail.com