UPLAT USER MANUAL



Virtual Robotic Laboratory and Learning Materials

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Ek'teki dokümanda yer alan bilgiler, "TİCARİ GİZLİ" bilgi niteliğindedir. Doküman, herhangi bir maksatla veriliş sebebi dışında kullanılamaz, İnovasyon Mühendislik dışındaki şahıs ve kuruluşlara açıklanamaz ve diğer şekillerde istifadelerine sunulamaz.

DOKÜMAN REVİZYON SAYFASI

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UPLAT MANUAL

Uplat gives ability that launch your robot in your browser without any installation in any operating system. Thanks to the uplat developer can develop own bot from anywhere or learn how to develop own bot from anywhere.

PAGES

1. Home Page

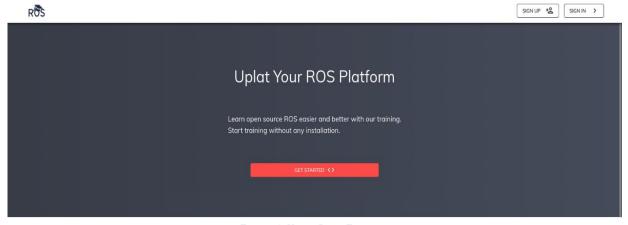


Figure 1. Home Page Entrance

In home page user can sign up and sign in system. User can create account "SIGN UP" or "GET STARTED <>" buttons then user can go into system using "SIGN IN" button. Buttons shown on Figure 1.

Home page gives some information about already created education robots. Figure 2 shows robots' information.



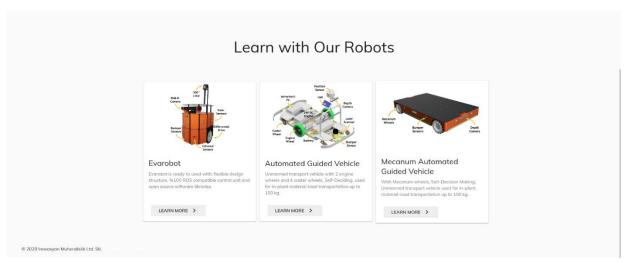


Figure 2. Robots Information

2. Login and Register Pages

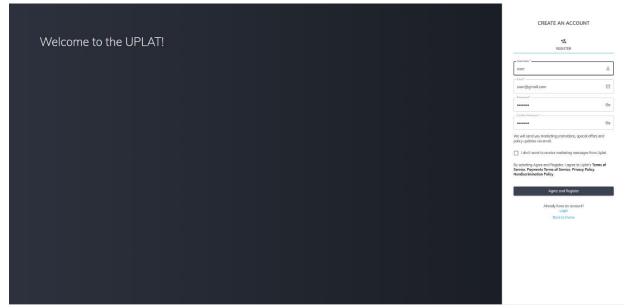


Figure 3. Create Account Page

This page uses for creating account. To create account uses have to fill username, email password and confirm password boxes.



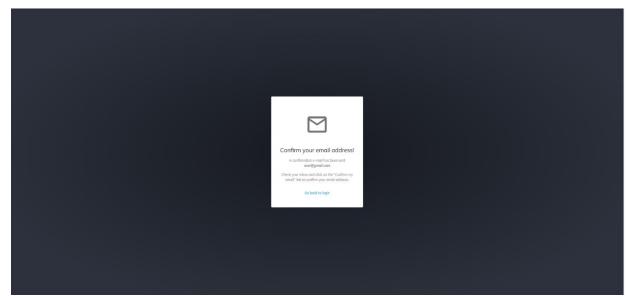


Figure 4. Confirm Mail Page

After the register process users have to confirm email. If the user does not confirm own mail, user cannot login to the system.



Figure 5. Login Page

After the confirmation process user ready to login the system.

3. Dashboard Page

In this page includes Home, Usage Details and Payment Details panels.

a. Home Tab

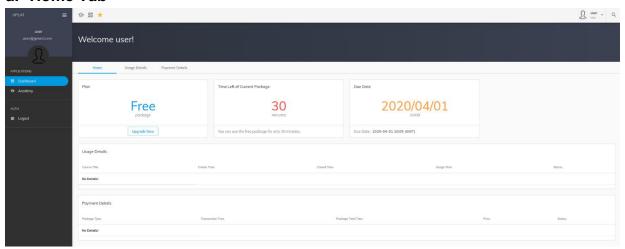


Figure 6. Dashboard Home Tab

User home page includes account current usage plan, remaining time, usage details, payment details and due time of current package.

b. Usage Details tab

In this tab users can see taken courses and course information such as course title, create time, closed time, usage time and status.



Figure 7. Usage Details Tab

c. Payment Details Tab

In this page users can check payment details for each course. Users can see package type, transaction type, package total time, price and package status in this tab.



Figure 8. Payment Details Tab

4. Academy Page

Academy page shows prepared trainings. Users can select or search prepared trainings. In this page user can continue his previous training from where he left off. Before the starting training users must give some information about billing. If the user clicks link that named "here", users are directed the user information page then gives information that wanted by system. After the giving information start button going to be activated. This means user is ready to use trainings. Then users click start button and move to training.





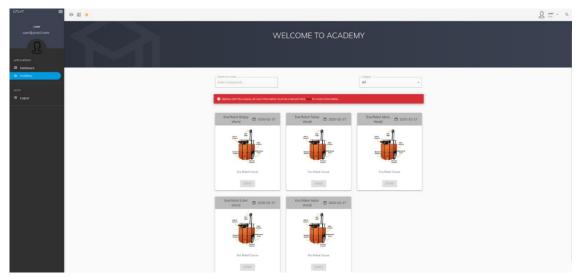


Figure 9. Academy Page

5. User Settings Pages

User Menu includes profile, account, billing, pricing, security interfaces. Users can access this page using with a button in the top right corner.

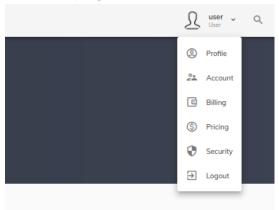


Figure 10. Information Page Button

a. Profile Tab

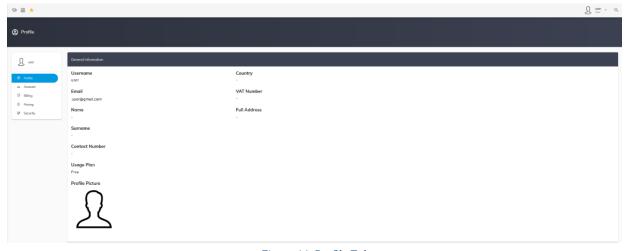


Figure 11. Profile Tab





This interface shows users general information such a name, surname, country etc... Profile interface shown on Figure 11.

b. Account Tab

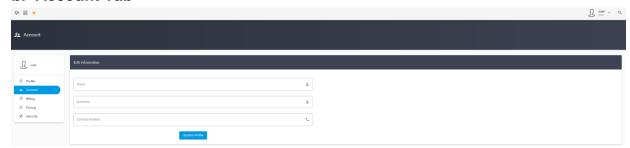


Figure 12. Account Tab

This interface allows user to change name, surname and contact number. Account interface shown on Figure 12.

c. Billing Tab

Billing types divided into two parts, personal and professional. Personal interface includes name, surname, country, city name, contact number, vat number and full address information. Personal billing interface shown on Figure 13.

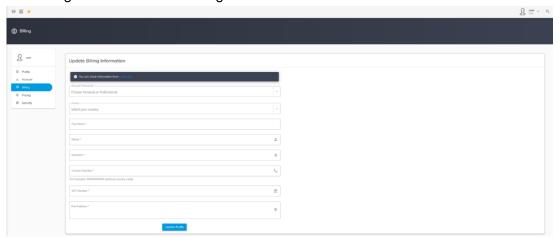


Figure 13. Personal Billing Tab

Unlike personal billing, professional billing has tax administration and tax number information. Professional billing interface shown on Figure 14.



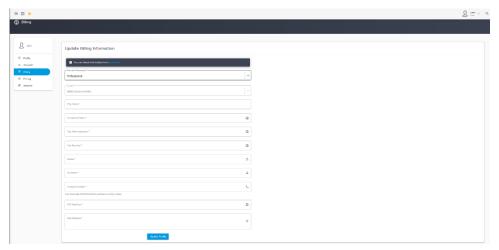


Figure 14. Professional Billing Tab

d. Pricing Tab

In this interface users can see usage plans, plans prices and plans details. Pricing interface shown on Figure 15.

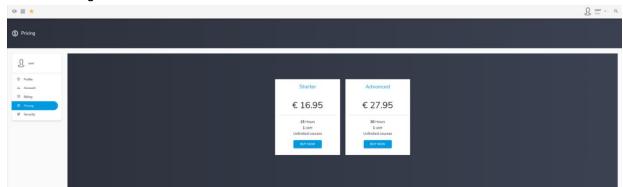


Figure 15. Pricing Tab

e. Security Tab

In this interface users can change password.

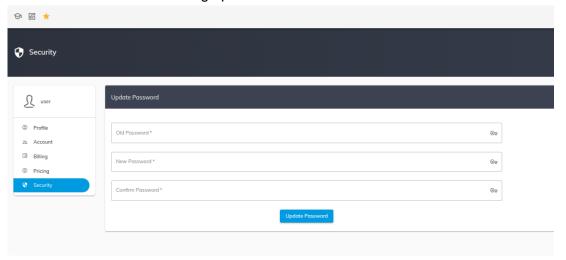


Figure 16. Security Tab





START A COURSE

Step 1: When starting a new training, first go to the Academy page. As shown in Figure 17, you can go to the Academy page using the navigation bar.

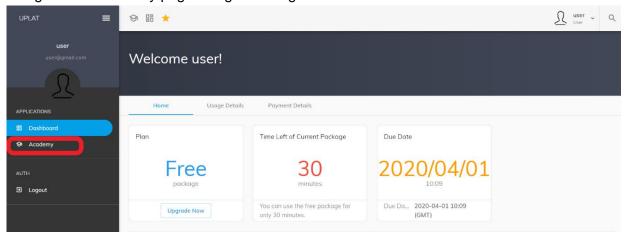


Figure 17. User's Dashboard

Step 2: Academy page You will see an interface like in Figure 18. All available trainings are displayed through this interface. To start a training, all the profile information required by the system must be entered completely. Otherwise, you will see a warning like in figure 15. After meeting this requirement, you must have sufficient training time. Your free trial period is 30 minutes. After this period is over, you need to get a new period with a payment plan suitable for you. In Figure 15, it is the education name field indicated by "1". It is the description of the training indicated by "2". START button is shown with "3". You can start training with this button. After clicking the START button, a new instance is created on AWS through our backend software. All necessary software for training is started on this instance. All these processes can take a few minutes. If a training is starting for the first time, it takes longer to start training. To start the training you want, please click the START button of the relevant training.

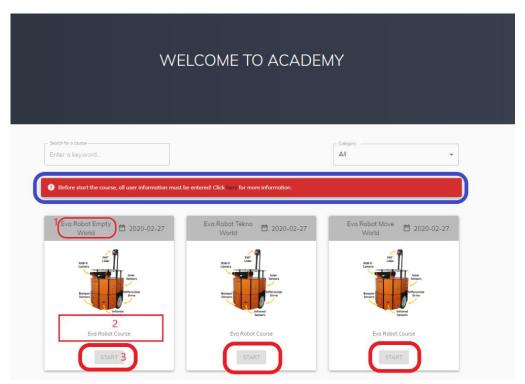


Figure 18. Available Courses for User

Step 3: The screen shot in Figure 19 is the information screen until the AWS EC2 instance that is required for training starts. This process may take a few minutes.

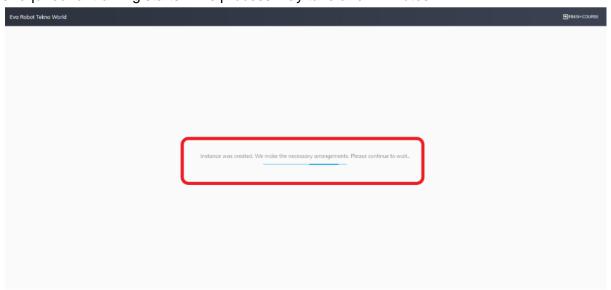


Figure 19. Instance Creation Step

Required software should be started after the instance is started. This process can take several minutes. Therefore, a waiting screen as in figure 20 welcomes you.



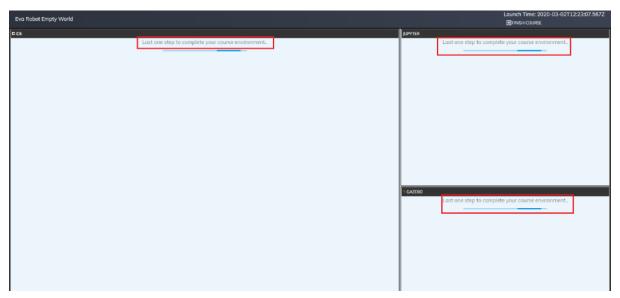


Figure 20. Preparing Environment Step

Then, after all applications have started, the interface in figure 21 welcomes you. The areas marked with 1 and 2 in this interface are the parts of Theia IDE. You can use it to write code in the location indicated by 1. There is a terminal in the area indicated by 2. All commands can be given to the instance through this terminal. The area marked by 3 is Jupyter Notebook. You can access the training document with Jupyter Notebook. The area indicates ed by 4 is the Gazebo Web application. You can view all the simulations you want through Gazebo Web. In the upper right, it can be viewed when training is started. The FINISH COURSE button is used to end training.

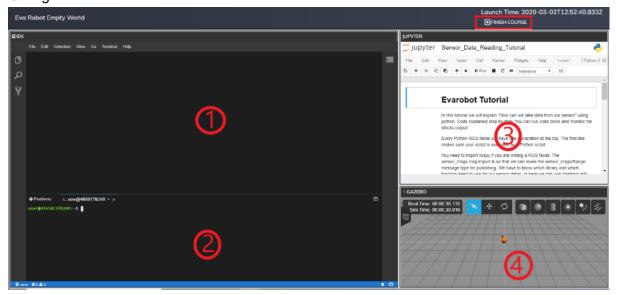


Figure 21. View of the course after running

TOOLS

1. Theia

a. Start a Terminal

In the section marked in Figure 22, you can open many terminals or split them. With a terminal, you can run any command except root commands. Our tutorials are designed so that no root command is required.

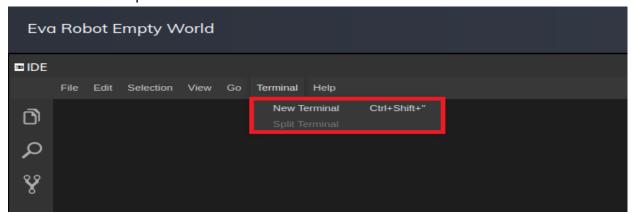


Figure 22. Theia New or split Terminal

b. File System

The file system appears in the EXPLORER section on the left side of Theia IDE. When the right mouse button is pressed as shown in Figure 23, many file operations can be performed in the opened section. For example, if filename.py is written on the screen that opens when the New File button is clicked, a python file is created. Theia IDE supports many programming languages. These transactions can be done with CLI commands with the terminal.

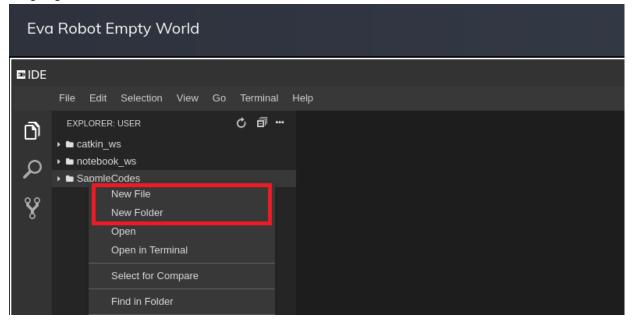


Figure 23. Theia File System





You can download the selected folder or file with the Download button located in the location marked in Figure 24. With the Upload button, you can upload a folder or file to the selected folder.

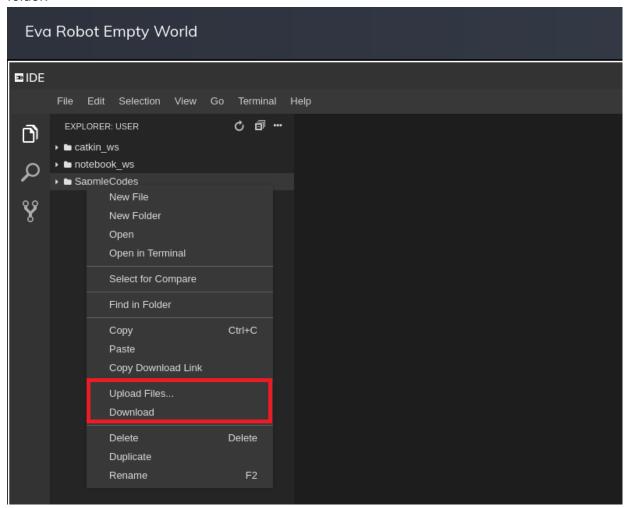


Figure 24. Theia Download and Upload Options

2. Gazebo

a. Main User Interface

Some parts of gzweb are marked in Figure 25. The button marked 1 opens the left panel. Real and simulation times are shown in the area marked by 2. There may be a few seconds difference between real time and simulation time at first start. This is due to the difference in the start time between gzserver and gzclient. There are different types of cursors in the field marked 3. You can choose the cursor you want in this section. There are different objects in the area marked with 4. If you want, you can add these objects to the world.



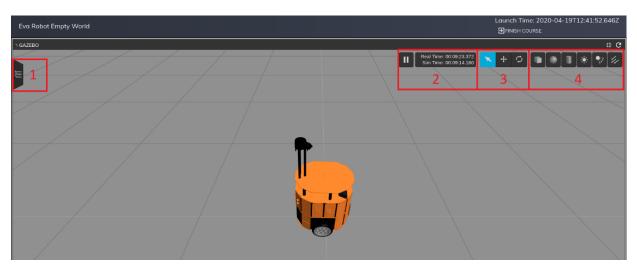


Figure 25. Gazebo Main User Interface

b. Left Panel

In the left panel shown in Figure 26, we will first examine the Edit button. You restart the world with the Reset World button located here. After clicking this button, the real and simulation time are reset. When the Reset Model Poses button is pressed, all models in the world return to their original state. The Reset View button defaults the viewing angle.

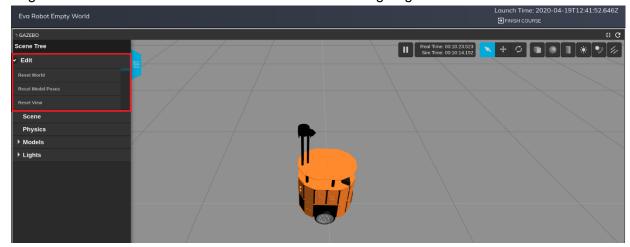


Figure 26. Gazebo Left Panel

Figure 27 shows the Models button on the left panel. By clicking this button, all models in the world are listed.



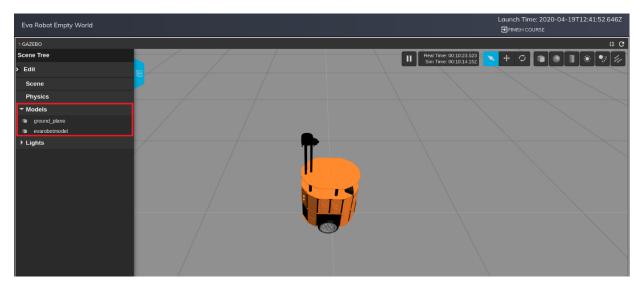


Figure 27. Gazebo Models

3. Jupyter

The Jupyter shown in Figure 28 is used to show the training documents. The user will learn through the educational content available here and will test himself with questions. In this way, the user will both learn and reinforce what they have learned.

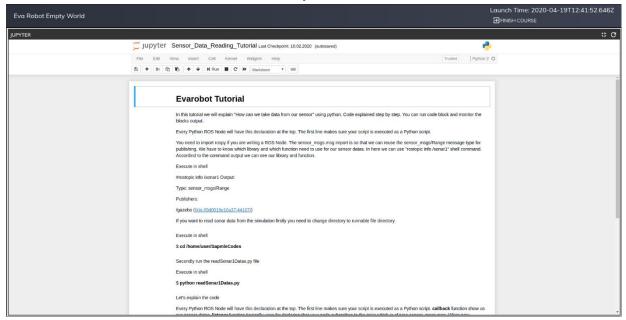


Figure 28. Jupyter View

FREQUENTLY ASKED QUESTIONS

1. What is The Uplat?

TheUplat is an easier and better learning platform with open source ROS tutorials. You can start training from anywhere without dealing with complex ROS setups.

2. How can I become a member?

You can test free use by clicking the "SIGN UP" link from <u>theuplat.com</u>. You do not have to pay any fees to become a member of our site.

3. Why should I become a member?





As a member, you can make your trials with a free use period and be aware of special offers for you.

4. Can I start education without being a member?

You are not allowed to participate in the trainings without becoming a member and completing the necessary information.

5. How can I update my membership information?

After logging into <u>theuplat.com</u> with your username and password, you can view your current information from the "PROFILE" tab and update your information from the "BILLING" tab.

6. If I forgot my password, what should I do?

If you have forgotten your password, it will be sufficient to click on the "I FORGOT MY PASSWORD" link in the member login section and enter the e-mail address you specified while signing up in the box on the page. A link will be sent to your e-mail address so that you can change your password. You can set a new password by clicking on the link. For your safety, this link will be active for 60 minutes. If you have not been able to set the password within 60 minutes, you should click the "I FORGOT MY PASSWORD" box again.

7. How do I verify my e-mail address?

After the registration process, you need to click on the activation link sent to your registered e-mail address.

8. Is my personal data protected?

Due process of Personal Data Protection Law, your personal data that you provide to theuplat.com is stored, protected, rearranged and shared with the authorized institutions if request this data.

9. Can I change or refund the purchased package?

No changes or returns can be made after the purchase.

10. What payment methods can be used?

You can pay your orders by Credit Card and Debit Card.

11. What is 3D Secure?

3D Secure is a security protocol that helps to prevent fraud in online credit and debit card transactions.

TROUBLESHOOTING

Gazebo Grey Screen

If Theia and Jupyter are fully loaded on the simulation page, loading bar disappear in gazebo panel but gazebo is still showing a gray screen you must refresh gazebo frame using a refresh button where gazebo panels top right corner.

Loading Problem

If your simulation page is not loaded fully. Refresh browser's related page.

Another Problems

If you encounter any error or situation that needs to be corrected, you can contact us at info@inovasyonmuhendislik.com e-mail address.