# **Code@Youth** An Innovative Program in the Digital Era

# "HOW TO" MANUAL



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### Home Page, Registration and Login

### Moodle Home Page

This is the home page of Code@Youth Program. In this page users can be informed about the available courses, have a look at any announcements concerning the program and approach links to Code@Youth's social media and forum.





At the top right corner there is the button that leads to the Login Page.



Finally, at this page there is menu that allows users to change between languages. The available languages are English, German, Italian and Greek.



### <u>Log In</u>

This is the page where users fill up their personal username and password in order to log in. There may be some lessons that allow users to connect as guests. How users join a Moodle site depends on the establishment: they might be given logins; they might be allowed to make accounts themselves, or they might be signed in automatically from another system. In Code and Youth's Moodle Platform users are welcomed to create their personal accounts. When created the teachers of the lessons can enroll users to them and assign roles.

	Log in
Username	tikis
Password	•••••
	Remember username
	Log in
Forg	otten your username or password?
Cookie	s must be enabled in your browser 🕐
Som	e courses may allow guest access
	Log in as a guest

If someone doesn't have an account there's the option to create one by clicking the "Create New Account" Button.



### **Create New Account**

In this page new users can create a new account by choosing their username and password and filling some other info required. As mentioned above, after creating an account users can login but they aren't enrolled to any lessons yet until the teacher enrolls them. After that they can access lessons' material.

<ul> <li>Choose your username and</li> </ul>	na passwora
Usemame*	
	The password must have at least 8 characters, at least 1 digh(s), at least 1 lower case letter(s), at least 1 $\!\!\!$
Password	Click to enter text $g_{\rm c}^{\rm e}$ 9,
<ul> <li>More details</li> </ul>	
Email address*	
Email (again)*	
First name*	
Sumame*	
City/town	Athens
Country	Greece
- Personal Info	
Date of Birth*	12 🔻 May 🔻 1947 🔻 🛗
Gender*	Choose ¥
School Class*	
Are you a Teacher?	0

### After Login

#### **Navigation Bar**

This is the menu bar that allows users to navigate to the main pages of Code and Youth Moodle that are analyzed bellow



### <u>Home</u>

The front page of a Moodle site - the page you reach from your browser - usually includes information about the establishment itself and it's the initial page seen by someone reaching Code and Youth Moodle site before login. Typically a student will see <u>courses</u>, some <u>blocks</u> of information. The front page is called "Home" In the <u>Navigation bar</u> and <u>Navigation block</u>.

A combination of <u>site policies</u>, <u>user authentication</u> and <u>front page settings</u> determine who can get to the front page. And once they get there <u>what they can see</u> and <u>what they can do</u>.

In many ways, a Front Page has similar features and functions to those in a <u>Course</u>. For example, <u>Activities</u>, <u>Resources</u> and <u>Blocks</u> can be added to the Front Page to give it different looks

In Code and Youth Home page after the user logs in, he can have a look at any announcements concerning the program, approach links to Code@Youth's social media and forum, follow links to the available courses and navigate through the Navigation Block.



### <u>Dashboard</u>

This is the first page that appears when the user is logged in. In this page users can have an overview of the lessons in which they are enrolled and navigate through the menu to any tools and activities available.

🐗 Home 🍙 Dashboard 🚔 My Courses 🛛 🕻	Customise this page 🗵 Hide blocks 🦨 Full screen
ANNOUNCEMENTS STAY TUNED!!!	н
Course overview	🕫 🊠 Navigation 👘
Programming Basics	Dashboard ■ Site home ▶ Site pages ▼ My courses ▶ Programming
Robotics and Coding	Robotics
	🐮 Online users
	Latest badges

More specifically, users can use the navigation menu to switch between the Home Page or any of their lesson pages.



Code and Youth's Moodle allows users to upload and maintain personal files. They can do so by using the Private Files block that appears to their Dashboard. In this block users can view their files or click the link to manage them.



By clicking the link they are led to their personal files' page where they can upload files by dragging and dropping them to the specified area

➢ → Site pages → Private files	
Files	Maximum size for new files: 10MB, overall limit: 100MB
	I You can drag and drop files here to add them.
	Save changes Cancel

or by clicking the Add button and searching them on their computer files.

				File p	icker	X
ome 🏼 🖓 Dast 🕋 <sub>Recent files</sub>				×		i Vi
> This PC > Desktop	ٽ ~	Search Desktop		Q		
New folder us_ne Name e-challenges projects	24 2/1 27	te modified /5/2017 11:24 μμ 5/2017 11:58 μμ /4/2017 11:57 πμ /6/2017 11:12 μμ Όλα τα αρχεία Open	Type File folder File folder Shortcut Microsoft Wo	C + C + C + C + C + C + C + C + C + C +	Eπιλογή αρχείου Δεν επιλέχθηκεανένα αρχείο.	
					Upload this file	

After they choose the file they want to upload they click the Upload Button

	File pic	cker	×
n Recent files			
🖄 Upload a file			
🖄 URL downloader			
<ul> <li>Private files</li> <li>Wikimedia</li> </ul>	Attachment	Επιλογή ορχείου file.docx	
	Save as		
	Author	Maria Smith	
	Choose license	All rights reserved	
		Upload this file	

After uploading a file it appears on their file list and by clicking on it users can manage it, edit it and download it.

➢ → Site pages → Private files								
Files			Ma	ximum size f	for ne	w files: 10MB, o		
							88	
	Files	A				_		¢
	Name	Last modified	\$	Size	\$	Туре		×
	file.docx	12/06/17, 13:20		11KB		Word docume	ent	
	Save changes	Cancel						

Edit file.docx
file.docx
Maria Smith
All rights reserved
1
Update Cancel
Last modified 12 June 2017, 1:20 PM Created 12 June 2017, 1:20 PM Size 11KB

Furthermore, users can choose to create folders to organize their content and download all content to their personal computers.

Finally, at their dashboards users can also view other online users, their latest badges, their calendar and any upcoming events.

🚰 Online users	
(last 30 minutes: 1) 🔥 Maria Smith	
🏶 Latest badges	
You have no badges to display	

🛗 Calendar								
•		Jun	e 201	7		•		
Mon	Tue	Wed	Thu	Fri	Sat	Sun		
			1	2	3	4		
5	6	7	8	9	10	11		
12	13	14	15	16	17	18		
19	20	21	22	23	24	25		
26	27	28	29	30				

## Upcoming events

There are no upcoming events

Go to calendar... New event...

### My Courses

Courses are the spaces on Moodle where teachers add learning materials and activities for their students. Courses may be created by admins, course creators or managers. Teachers can then add the content and re-organize them according to their own needs.

Students can view their course list at the Dashboard page or by clicking 'My Courses" at the Navigation Bar.





By clicking a course they are led to its page where they can find the following.

### <u>General Info</u>

In this area students can find information concerning the teacher, the hours and contact and communication methods of the lesson.

General Info
Teacher:
Teacher Name
Class Hours:
Mon-Fri, 11.00-15.00
Contact:
teacher@examle.com
Communication Methods:
Announcements
Chatroom Chatroom
Programming Forum
Teachers' Forum
Not available unless: Your Are you a Teacher? is not empty
Star Programming Checklist
Supplementary Notes:
🧕 Syllabus
🔟 Visual Basic Instructions and Hints

### o <u>Announcements</u>

Here the user can find any announcements or news posted for the specific lesson.

> My courses > Programming > General Info > Announcements

## Announcements

General news and announcements

(No news has been posted yet)

#### o <u>Chatroom</u>

There is a chatroom that allows users of a specific lesson to communicate. Once they are led to the chatroom page they have to enter the chat. After they enter they can see other users and sent personal messages to the ones that are online as well. The chatroom is used as a synchronous communication method where users can send direct messages.

lick here to enter the chat now	🐨 Programming: Programming Chatroom - Google Chrome		-				
Use more accessible interface	143.233.226.111/5/codeandyouth/mod/chat/gui_ajax/index.php?id=1						
	13:23 Maria Smith Maria Smith has just entered this chat	8	Maria	a Smith	1		

o <u>Forum</u>

In each lesson there is a forum that allows users to communicate and discuss any lesson issues. While the chatroom messages are private (between two users) and as mentioned above synchronous, forum messages are public and any enrolled user can see them and comment on them and also they are asynchronous.

## **Programming Forum**

Add a new discussion topic

(There are no discussion topics yet in this forum)

If the user needs to add to the forum a new topic for discussion they can do so by clicking the "Add a new discussion topic" button. Once clicked it leads to another page where the user needs to fill in some information about the new topic. When the form is filled the user can post the new topic to the forum.

> My courses > Programming >	General Info > Programming Forum		
Programming Foru	m		
- Your new discussion top	ic		
Subject*			
Subject			
Message*			
			11
Discussion subscription ⑦			
		an on attach	monto: 0
Attachment ⑦	Maximum size for new files: 500KB, maxim	mum attach	
Attachment (?)	Maximum size for new files: 500KB, maximum size for		
Attachment (?)			
Attachment (2)			
Attachment (2)	Files		
Attachment (2)			
Attachment (2)	Files		
Attachment (2)	Files		

### o <u>Teacher's Forum</u>

This is like the Forum mentioned above but is only accessible to the users that have been given a teacher role.



### o <u>Checklist</u>

This option allows users to keep track of their progress in the specific lesson. Each lesson has a list of activities that are considered necessary in order to complete it. Once the users completes an activity it is automatically checked and the completion bar percentage grows accordingly.



### o <u>Supplementary Notes</u>

Here users can find supplementary material (glossaries, files etc) concerning the lesson.



### • <u>Topics</u>

Each lesson is divided in a number of topics depending to the course syllabus.

o <u>Books</u>

In each topic students can find a small description of it and a file that is used as a book.



## Each book is divided in chapters. Once the user reads all the chapters the book is considered to be completed.

🗁 > My courses > Programming > Introduction to Algorithms and Flowcharts > Introduction to Algorithms and Flowcharts - Book

### Introduction to Algorithms and Flowcharts - Book

Next: 2. Guidelines for drawing a flowchart >

#### 1. Intro

An algorithm is a procedure for solving a problem, based on conducting a sequence of specified actions. A computer program can be viewed as an elaborate algorithm. There are three basic logic structures in computer programming: sequence, iteration and selection.

Sequence: An action, or event, leads to the next ordered action in a predetermined order. The sequence can contain any number of actions, but no actions can be skipped in the sequence.

Iteration: The program asks a question, and if the answer requires an action, it is performed and the original question is asked again until the answer is such that the action is no longer required.

Selection: It is also called decision. In a selection structure, a question is asked, and depending on the answer, the program takes one of two courses of action, after which the program moves on to the next event.

A flowchart is a graphical or symbolic representation of a process. Each step in the process is represented by a different symbol and contains a short description of the process step. The flowchart symbols are linked together with arrows showing the process flow direction.

Flowcharts are designed in the early stages of formulating computer solutions and are used to create a communication link between programmers and business people. They are helpful in understanding the logic of complicated problems and play a vital role in the programming of a problem.

Writing complex programs in any programming language becomes easier after a flowchart is drawn. Flowcharts are helpful in explaining the program to others, so a flowchart is used for better documentation of a complex program.

Next: 2. Guidelines for drawing a flowchart >

# Students can read the chapters continuously or approach them by the Table of Contents.



Badges

On each course students are able to obtain a number of awards when completing specified activities. These awards are called Badges. In Code and Youth Moodle Site there are different badges for each lesson and more specifically there are different badges for each lesson topic.

For each badge there is an image, a name, a description that analyzes what the badge concerns and some criteria that highlight what the user must accomplish in order to achieve this badge. Also, for each badge there is a list of roles that are responsible for awarding the badge (e.g. Teachers).

### Programming Basics: Badges

Number of badges available: 6

Image	Name 🚔	Description	Criteria	Issued to me A
٩		The owner of the Programming Techniques Badge has the basic knowledge regarding programming basics on the basis of Visual Basic. Learning Outcomes: • Identify the three basic programming constructs used to control the flow of execution: Sequence,	Understand the three basic programming constructs: Sequence, Selection, and Iteration. Be able to use the three programming constructs in a procedural programming language (Visual Basic). Be able to understand and use IF statements, CASE/SELECT Statements.	
	Programming Techniques	Selection, Iteration • Understand and use selection in a procedural programming language (Visual Basic), including the use of IF Statements and CASE/SELECT Statements • Understand and use iteration in a procedural programming language (Visual Basic), including the use count- controlled loops (FOR-END FOR loops) and condition controlled loops (WHILE- ENDWHILE and REPEAT-UNTIL loops) • Understand and use nested selection and nested	Users are awarded this badge when they complete the following requirement: • This badge has to be awarded by a user with the following role: • Teacher	

## Robotics and Coding: Badges

Number of badges available: 7

Image	Name 🛎	Description	Criteria	Issued to me
۲	The Sumo Wrestle Program	The owner of the The 'Sumo Wrestle' Program Badge can familiarize with the 'Sumo Wrestle' program. Learning Outcomes: Understand the 'Sumo Wrestle' program. • Be able to implement and demonstrate the 'Sumo Wrestle' program. • Be able to improve the 'Sumo Wrestle' program	Program 'Sumo Wrestle' Program Users are awarded this badge when they complete the following requirement: • This badge has to be awarded by a user with the following role: • Teacher	
	edWare Variables	The owner of the edWare Variables Badge can familiarize with variables used in the edWare. Learning Outcomes: • Understand the two types of variables: 'bytes' and 'word'. • Be able to identify problems that involve variables. • Be able to declare and initialise variables. • Be able to use 'read' icons. • Be able to code a robot using 'read' icons. • Be able to use	Program Edison using read icons (e.g. alarm clock) Program Edison using 'read' and 'data' icons (e.g. follow the torch) Quiz (Variables, 'read' and 'data' icons) Users are awarded this badge when they complete	

### • <u>Course Menu</u>

o <u>People</u>

On each course there is as mentioned before a number of people participating. Each user has the ability to view a list of the participants and some basic information about them along with their email addresses. Users can do so by clicking People on the specific course Menu.

	y courses > Programmin	ng > Participants			
Parti	cipants				
My course	s				User list
Program	ming		• Brief		*
Current rol	e				
All partic	ipants				•
- First name		I J K L M N O P Q R S T U V J K L M N O P Q R S T U V V			
User pictu	ure First name 🌰 / Surn	ame Email address	City/town	Country	
٩	Admin User	ypapa@iit.demokritos.gr	Athens	Greece	
8	Maria Smith	niki_tikis@hotmail.com	Athens	United Kingdom	
3	Nikitas Voukelatos	nikitas.vouk@gmail.com	Athens	Greece	
<b>A</b>	Test Teacher	ypapa@imm.demokritos.gr	Athens	Greece	



o <u>Grades</u>

By clicking this option users can see their progress and grades for one particular lesson defined according to the lesson's needs. In Code and Youth Summer School there is not a strict policy for Grades and it is generally preferred to assign badges to students in order to award their progress.

o <u>Chats</u>

By clicking this option users can see a list of all the chats for this particular lesson.

My courses > Programmir	g > Chats
ts	
· · · · · · · · · · · · · · · · · · ·	
	My courses > Programmin ts Name Programming Chatroom

### o <u>Checklists</u>

By clicking this option users can all the checklists and their progress in them for this particular lesson.

 $\triangleright$  > My courses > Programming > Checklists

## Checklists

Торіс	Name	Progress
0	Programming Checklist	0%

#### o <u>Forums</u>

By clicking this option users can see a list of all the forum conversations for this particular lesson.

					Subscribe to all forums Subscribe from all forum
General fo	rums				
Forum	Description	Discussions	Subscribed	Email digest type 💿	
Announcements	General news and announcements	0	Yes	Default (No digest)	
				Default (No digest)	

### o <u>Glossaries</u>

By clicking this option users can see a list of all the available glossaries for this particular lesson.

₿ >	My courses	> Progra
Glos	ssarie	s
Topic	Name	Entries
	Glossary	19

### o <u>Resources</u>

By clicking this option users can see all available resources for this particular lesson.

B → My courses → Programming → Reso	ources	
Торіс	Name	Description
	1 Syllabus	
	🔁 Visual Basic Instructions and Hints	
Introduction to Algorithms and Flowcharts	Introduction to Algorithms and Flowcharts - Book	
Programming Techniques	Programming Techniques - Book	
Operators	Operators - Book	
Different Data Types	Different Data Types - Book	
Errors and Test Strategies	Errors and Test Strategies - Book	

### Profile Menu

Moodle provides you with a personal profile that applies to all the Moodle subjects you are enrolled in. You can access your profile settings menu by clicking to your name at the top right corner.



### Dashboard

Quick access to Dashboard is also available from the Profile Settings menu that appears on the top right corner of the screen when the user is logged in.

### • View your student profile

Every user in Moodle has a Profile Page that can be reached from the Profile Menu, that appears on the top right corner of the screen when the user is logged in, once the user clicks View Profile option. This page links to further pages allowing the user to edit the profile information and preferences, view their forum/blog posts and check any reports they have access to.

User details	Course details
Edit profile	Course profiles
Country	Programming Basics
United Kingdom	Robotics and Coding
City/town	
Athens	Miscellaneous
Date of Birth	Blog entries
10 January 2002	Forum posts
Gender	Forum discussions
Female	Learning plans
School Class	Deporte
1st Grade High School	Reports
	Browser sessions
Are you a Teacher?	
About me My name is Maria Smith, i am 15 years old and i live in London. I'm	
interested in learning programming because i would like to combine	
it with the field of medicine, which i want to study in the future.	
Interests and Hobbies	
Dancing, reading books, listening to music.	

In this page the user can see and access the badges that they have obtained.

### Badges

Badges from Code@Youth: An Innovative Program in the Digital Era:



### • Edit your student profile

You can edit your profile information at any time by clicking the 'Edit profile' in the Profile Settings. You can choose to hide or display your email address, include a photo or an avatar, or add a link to your website. 'Edit profile'. If you wish to save the changes that have been made you can click Update Profile.

➢ → Preferences → User account →	Edit profile
Maria Smith	
- General	
First name*	Maria
Surname*	Smith
Email address*	niki_tikis@hotmail.com
Email display	Allow everyone to see my email address
City/town	Athens
Select a country	United Kingdom 🔹
Timezone	Server timezone (Europe/Athens)
Description ⑦	

▶ User picture
Additional names
▶ Interests
▶ Optional
▶ Personal Info
Update profile

### Preferences

By clicking this option the user can access a list of links that allow him to edit his profile settings. Users can change their password here by clicking "Change Password" in the menu that appears when we click Preferences.

> Preferences		
Preferences		
User account	Blogs	Badges
<ul> <li>Edit profile</li> <li>Change password</li> <li>Preferred language</li> <li>Forum preferences</li> <li>Editor preferences</li> <li>Course preferences</li> <li>Calendar preferences</li> <li>Message preferences</li> <li>Notification preferences</li> </ul>	<ul> <li>Blog preferences</li> <li>External blogs</li> <li>Register an external blog</li> </ul>	<ul> <li>Manage badges</li> <li>Badge preferences</li> <li>Backpack settings</li> </ul>

### • <u>Calendar</u>

The Calendar displays the upcoming events. The events can be viewable in all courses (created by admin users), in a particular course (course members - created by teachers) or in groups (event viewable only by members of a group - created by teachers). Finally, there are personal events that can be created by a student and are viewable by him.

Calendar		
Upcoming events for:		New event
Programming •		
There are no upcoming events		
	Export calendar	
	Manage subscriptions	
	ICal	

### Log Out

By clicking this option the user logs out and returns to the Home Page.