



Al Basra University
College of Computer Science and Information
Technology
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Electronic Technology (E-Technology)
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Lect. 11

Case study
(Moodle)

Moodle is a learning platform designed to provide educators, administrators and learners with a single robust , secure and integrated system to create personalized learning environments .moodle is an open source platform that is very popular globally .

The full form of moodle is modular Object-Oriented Dynamic Learning Environment and it is developed using the PHP programming language . Moodle is used in many countries around the world as it is available in various languages.

Moodle is a web application and can be downloaded from <http://download.moodle.org/> for free by anyone .

After downloading Moodle it can be installed on a web server and can be accessed using a web browser . It can be edited to fit ones need . The latest version of Moodle is 3.0.1 but Metropolia is using Moodle 2.8 , following picture 1 :show Moodle for Metropolia university of Applied Sciences .



The screenshot displays the Moodle LMS interface for Metropolia University of Applied Sciences. At the top, there is a banner with the Metropolia logo on the left and a collage of images on the right, including a person working with a colorful structure, a white car, and a hand holding a pen. Below the banner is a dark red navigation bar containing links for 'English (en)', 'My courses', 'Frontpage', and 'All courses', along with a user profile icon for 'Nischal'.

The main content area is divided into three columns:

- MOODLE-TIETOA**: Welcome to Metropolian Moodle-oppimisympäristöön. Käytössäsi on Moodle 2.8. Uuden työtilan saat Helpdeskistä palvelupyynnönä. Kirjauttuasi voit myös itse luoda työtilan vapaakenttään yhteiset kategoriassa. Welcome to Metropolia's Moodle learning environment. You are using Moodle 2.8. Get a new course space from
- OHJEITA**: Moodle 2.7 Opiskelijan opas, Moodle 2.7. Opettajan opas, Tutorials, Moodle News
- AJANKOHTAISTA**: Moodle on päivitetty 2.8-versioon. Työtilat tilataan helpdeskistä palvelupyynnönä. Katso Tuubista ohje. Apua Moodlen käyttöön saa oman tulosalueen e-asiantuntijalta.

Picture 1:Moodle for metropolia university of applied science

Picture 1 shows Moodle installed in Metropolia server and it can be accessed through <https://moodle.metropolia.fi/>. To login we need Metropolia credentials .

The user interface of Metropolia Moodle is relatively easy and has only necessary information .it has a link to a book with instructions on how to use Moodle and links to the latest news on Moodle .

To create a new course in Metropolia Moodle one has to request for a course space from IT helpdesk in Metropolia .

In the main Moodle website (<https://moodle.org/>) there is a demo selection where we can understand about using Moodle more .

There are separate examples for instructions and students to see how Moodle works . From the example we can see that there are several advantages of using Moodle.

My courses Frontpage All courses This course Nischal

Home My courses Tieto ja media Information Technology EM2014

Electricity and Magnetism (TI13S2)

General Your progress

- News and announcements
- Discussion
- How to get the eBook
- Student introduction to Moodle (Video 12 min)
- User grade report

1. Orientation (8 h)

30.10. - 5.11.2014

Review Ch 25, Electric circuits from Essential University Physics (or Ch 6, in eBook). You should be able to:

- read electric circuit diagrams
- analyse simple circuits
- use node and loop laws
- describe the time-dependent behaviour of circuit having capacitor

Thursday 30.10.2014 5 p.m. - 8:45 p.m. = 4 hours + homework.

- Orientation questions
- Home assignment 1
- Solutions
- Quiz

ADMINISTRATION

- Course administration
- Grades
- My profile settings

SEARCH FORUMS

Advanced search

LATEST NEWS

Resit examination
20 Jan, 07:21 Sakari Lukkarinen

Evaluations and grade ready
19 Jan, 14:42 Sakari Lukkarinen

Last assignments
22 Dec, 10:46 Sakari Lukkarinen

Seventh week summary
12 Dec, 10:18 Sakari Lukkarinen

Fifth and sixth week summary
11 Dec, 16:05 Sakari Lukkarinen

Older topics ...

UPCOMING EVENTS

There are no upcoming events

Go to calendar...
New event...

Picture 2: A course created in Metropolia Moodle

As we can see in picture 2 , the user interface of a course space for students looks more or less similar to that in tuubi .but the major advantage of using Moodle is that the course is more structure here . The instructor can create a quize .

Create assignments and upload materials here . The materials can be in form of audio or video files in addition to texts .

Students can also track their progress from each chapter while using Moodle .

There are several advantages of using Moodle and it was one of the platform we considered to publish our materials .

There are several courses taught by using Moodle in Metropolia already. Compared to the edX is a new platform in Metropolia component if not more . So , we decided to use the edX platform instead.

Metropolia edX :

EdX is an organization founded by the Harvard University and the Massachusetts University of Technology to promote online education . The universities aim to promote campus-based learning and create a global online community through edX .

Using edX these universities plan to study the current trends in online education as they acknowledge that online education is the future of the learning process

• **The mission of edX organisation is:**

- Increase access to high quality education for everyone , everywhere .
- Enhance teaching and learning on campus and online .
- Advance teaching and learning through research .

The major difference of edX from other online learning management systems is that it is founded by two of the well-known universities in the field of technology and will be continuously monitored by them .

This will ensure the quality of the content published in this platform and encourages more and more students to join this global community.

Open edX is the open-source platform that hosts the edX courses for free and with this platform educators and technologists can build learning tools and contribute new features to the edX platform while creating innovative solutions that benefits students everywhere .

In Metropolia UAS open edX is relativey new platform hosted by Metropolia UAS and KNORK project . KNORK is aproject supported by European Commission that aims in promoting knowledge and work practices in education through digital competences .

In this project the members develop and test pedagogical methods , different digital tools and teacher training models to improve the competencies and practices in the higher education .

The experiments will be carried out in Bulgaria , Finland , Italy and Sweden . And Metropolia UAS is one of the members that will take part in this project along with University of Helsinki and Helsingin Medialukio from Finland .

To access our course in edX user could easily register their account through the homepage (<http://edX.mw.metropolia.fi/>) and find the course . In order to create a new Metropolia edX the user should sign up in edX studio following the link: //http://studio.edX.mw.metropolia.fi/ .



REGISTER NOW

Sign in

Welcome to Open edX!

This is an Open edX instance hosted by Metropolia UAS and Knork project.

EDX
DEMOX
EDX DEMONSTRATION
COURSE
Starts: Feb 05, 2013

KNORK
OTTP02
ONLINE TEACHE TRAINING
PACKAGE FOR
TRIALOGICAL LEARNING,
KNORK
Starts: Oct 01, 2015

METROPOLIAUNIVERSITYOFAPPLIEDSCI
SK00BY
ONT MATERIALS
Starts: TBD

METROPOLIA
TV00AA46-3002-H2
VIDEOEDITOINNIN
PERUSTEET
Starts: TBD

Picture 3 :Homepage of Metropolia edX for students

Above picture shows the homepage of open edX used in Metropolia . It has the link to create a new account or to sign in the top and lists of course available now towards the bottom . The course called “ONT MATERIALS” see above the course the that is prepared in this project.



Picture 4: Screenshot from Metropolia edX of Studio

As we can see from pictures 3 and 4 , the pages to create a course and view an available course are different and the user should register in the page accordingly . So in order to create the course I registered in edXstudio and the details of preparing the course are described below .

Creating an account :

After clicking the sign up button in the home page (upper - right corner as seen in picture 4 the user is directed to the registration page .

Sign Up for edX Studio

[Already have a Studio Account? Sign in](#)

Ready to start creating online courses? Sign up below and start creating your first Metropolia Edx course today.

E-mail *

example: username@domain.com

Full Name *

example: Jane Doe

Public Username *

example: JaneDoe

This will be used in public discussions with your courses and in our edX101 support forums.

Password *

|

Your Location

Preferred Language

I agree to the [Terms of Service](#) *

CREATE MY ACCOUNT & START AUTHORING COURSES

Who is Studio for?

Studio is for anyone that wants to create online courses that leverage the global Metropolia Edx platform. Our users are often faculty members, teaching assistants and course staff, and members of instructional technology groups.

How technically savvy do I need to be to create courses in Studio?

Studio is designed to be easy to use by almost anyone familiar with common web-based authoring environments (Wordpress, Moodle, etc.). No programming knowledge is required, but for some of the more advanced features, a technical background would be helpful. As always, we are here to help, so don't hesitate to dive right in.

I've never authored a course online before. Is there help?

Absolutely. We have created an online course, edX101, that describes some best practices: from filming video, creating exercises, to the basics of running an online course.

[Additional help you'll discover here to help you](#)

Picture 5: Registration page of Metropolia edX studio

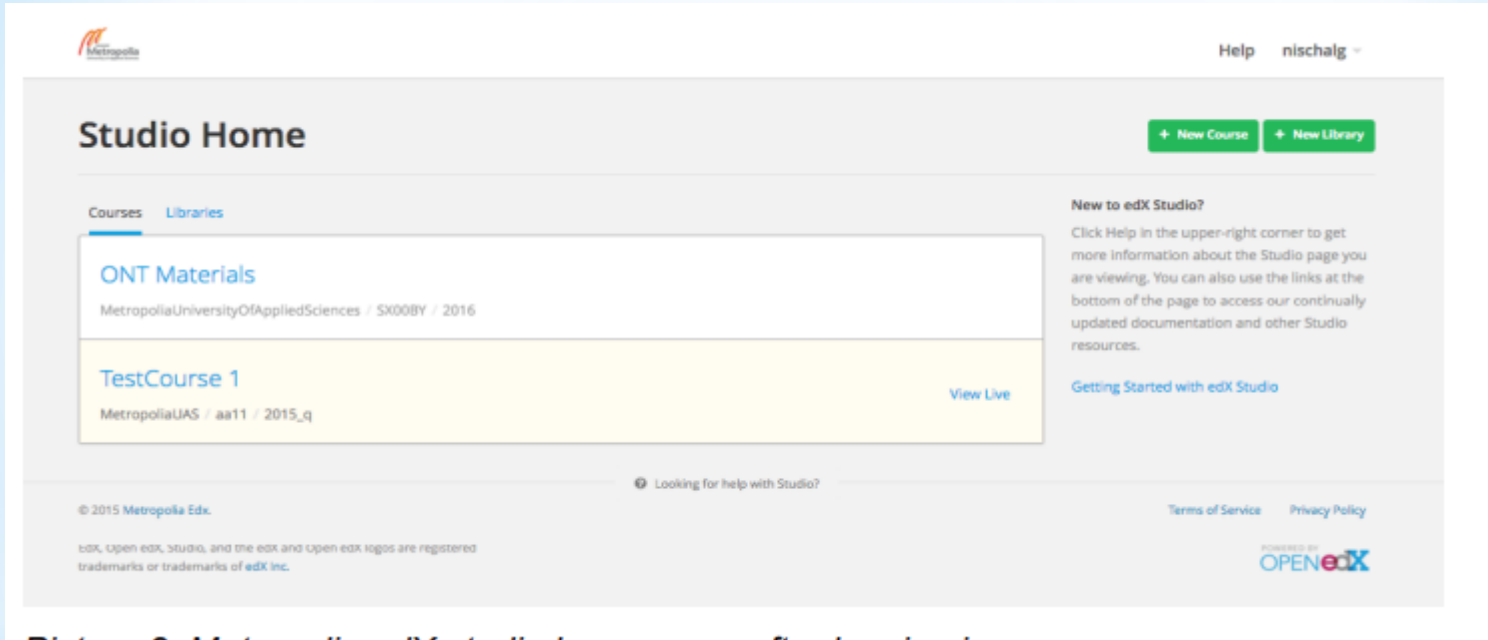
As we can see above picture, on the registration page the user has to fill in the required details, the details required for the registration are :

- * E-mail - it is recommended to use the institutional e-mail address.
- * Full Name this name will appear in the profile and it will not be displayed publicly . This name will be needed to issue any certificates the user may earn.
- Public username - this will be displayed in any discussions or forums the user will take part in and it cannot be changed once the account is created.
- Password it is recommended to use to use unique and strong password .
- Location - this is not a required field and user can skip filling this part .
- Preferred Language - this is also this is also not required field and user can leave it blank .

After filling up the form in registration page there is link to terms of service at the bottom to which the user should agree to and after checking the box the user will be able to create their account at Metropolia edX and start authoring course .

Login and create anew course :-

After creating the account the user will receive an email with a link to activate the account . After clicking the user will be directed to studio home page for the user .

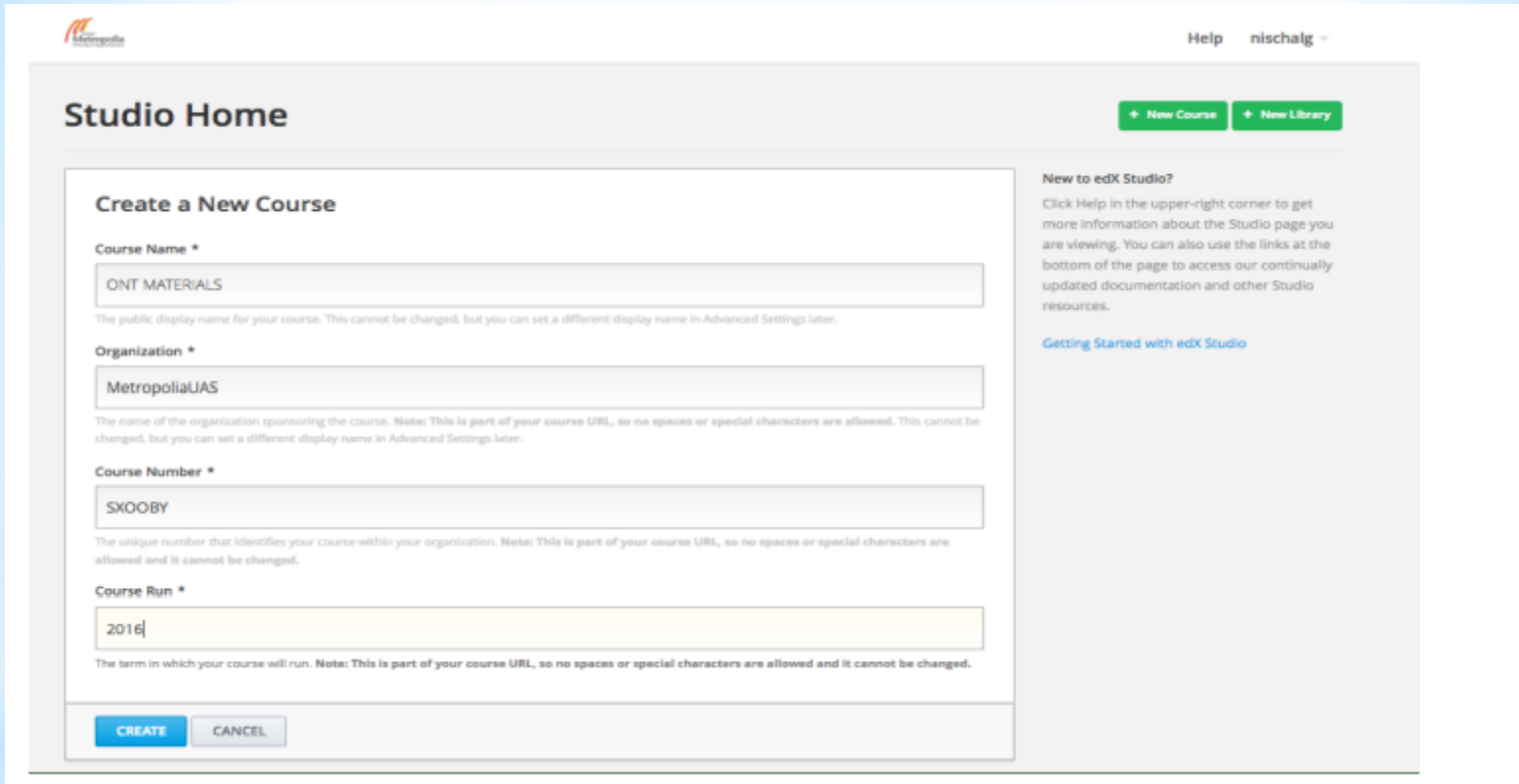


Picture 6: Metropolia edX studio home page after logging in

As we seen from above picture , after logging in the user will be able to see the lists of course the user is authoring . On the top right corner there is button with link to create a new course . If the user wants to edit already existing course they have to click on the course in the list and follow .

Creating a new course :-

After clicking the new course button the user is directed to a new page with details to be filled about the course .



The screenshot shows the 'Studio Home' page in edX Studio. At the top right, there is a 'Help' link and a user name 'nischalg'. Below the header, there are two green buttons: '+ New Course' and '+ New Library'. The main content area is titled 'Create a New Course' and contains four mandatory fields, each with a red asterisk:

- Course Name ***: A text input field containing 'ONT MATERIALS'. Below it, a note states: 'The public display name for your course. This cannot be changed, but you can set a different display name in Advanced Settings later.'
- Organization ***: A text input field containing 'MetropoliaUAS'. Below it, a note states: 'The name of the organization sponsoring the course. Note: This is part of your course URL, so no spaces or special characters are allowed. This cannot be changed, but you can set a different display name in Advanced Settings later.'
- Course Number ***: A text input field containing 'SXOBY'. Below it, a note states: 'The unique number that identifies your course within your organization. Note: This is part of your course URL, so no spaces or special characters are allowed and it cannot be changed.'
- Course Run ***: A text input field containing '2016'. Below it, a note states: 'The term in which your course will run. Note: This is part of your course URL, so no spaces or special characters are allowed and it cannot be changed.'

At the bottom of the form, there are two buttons: a blue 'CREATE' button and a grey 'CANCEL' button. To the right of the form, there is a section titled 'New to edX Studio?' with a link to 'Getting Started with edX Studio'.

Picture : 7 details about new course

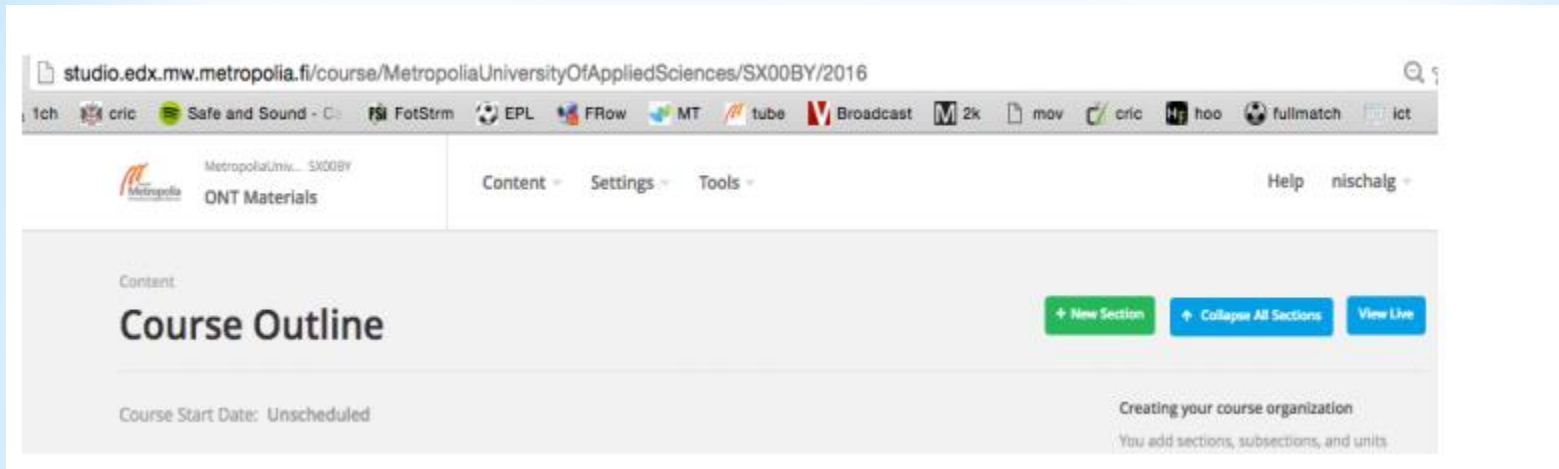
Above picture shows the details to be filled in order to create the new course . All the fields are mandatory fields . The details to be filled are :

- Course Name- it is the title of the course and capitalization is recommended .
- Organization - here we can fill the name of the university . The use of white space or any special characters is prohibited, as it is a part of the course URL .
- Course Number - the study code of the subject in the university .
- Course Run - the year and term in which the course will run . Here also the use of whitespace and any special characters is prohibited for the same reason as above . But underscore (_) can be used .

After filling all the required details we can create the course by clicking the create button at the bottom left corner of the form . After the course has been created the new course will open in the course outline page .

Course outline and registration :

After the course appears on the outline page the next step is to register on one's own course by clicking on the view live button that appears in the upper-right corner of the screen .



Picture 8: Course outline of the course created

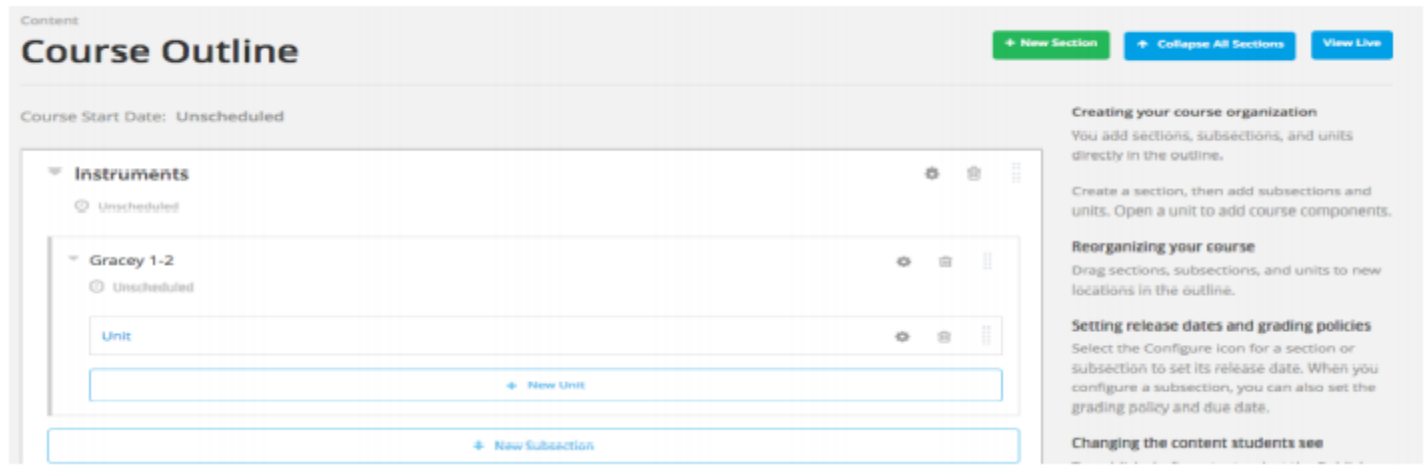
As we can see in picture 8 the course URL includes the course , organization course number and course name . In this course the organization is Helsinki Metropolai university of Applied Sciences , the course number is SX00BY and the year run is 2016 . thus the URL of the course will be :

<https://studio.edX.mw.metropolia.fi/course/MetropoliaUniversityOfAppliedSciences/SX00BY/2016>

Creating Section ,Subsection :-

In order to build a course in edX we have to create a section , subsection and unit . The unit consists of various components of the course . We can build a new section from the course outline . As we can see in picture 8 , there is a button to create a new section in the top right- hand corner .Once the section is created we can create a subsection and add the units from there .

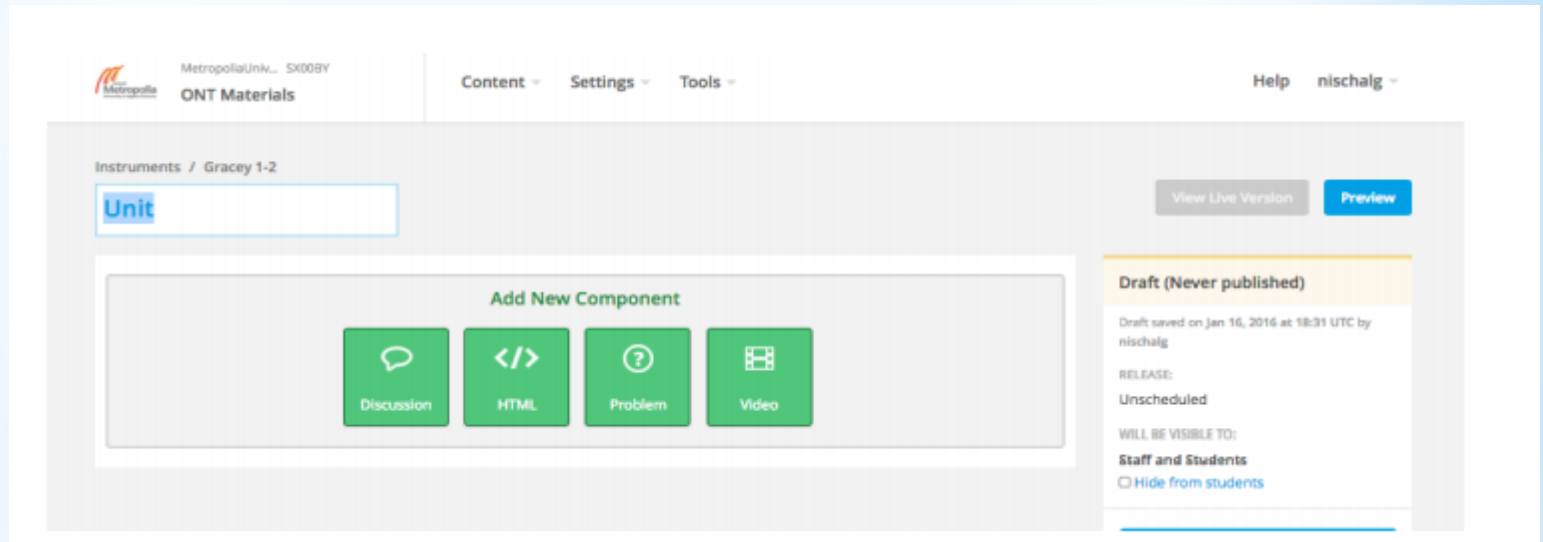
Picture 9: Creating Subsection & unit



As we can see in above picture , once the section is created we can create multiple subsections under that section . We can provide them with the required headings .we have tools to copy and delete the section and subsection and as well as to schedule them. The sections and subsections will not appear in students view before the scheduled time .

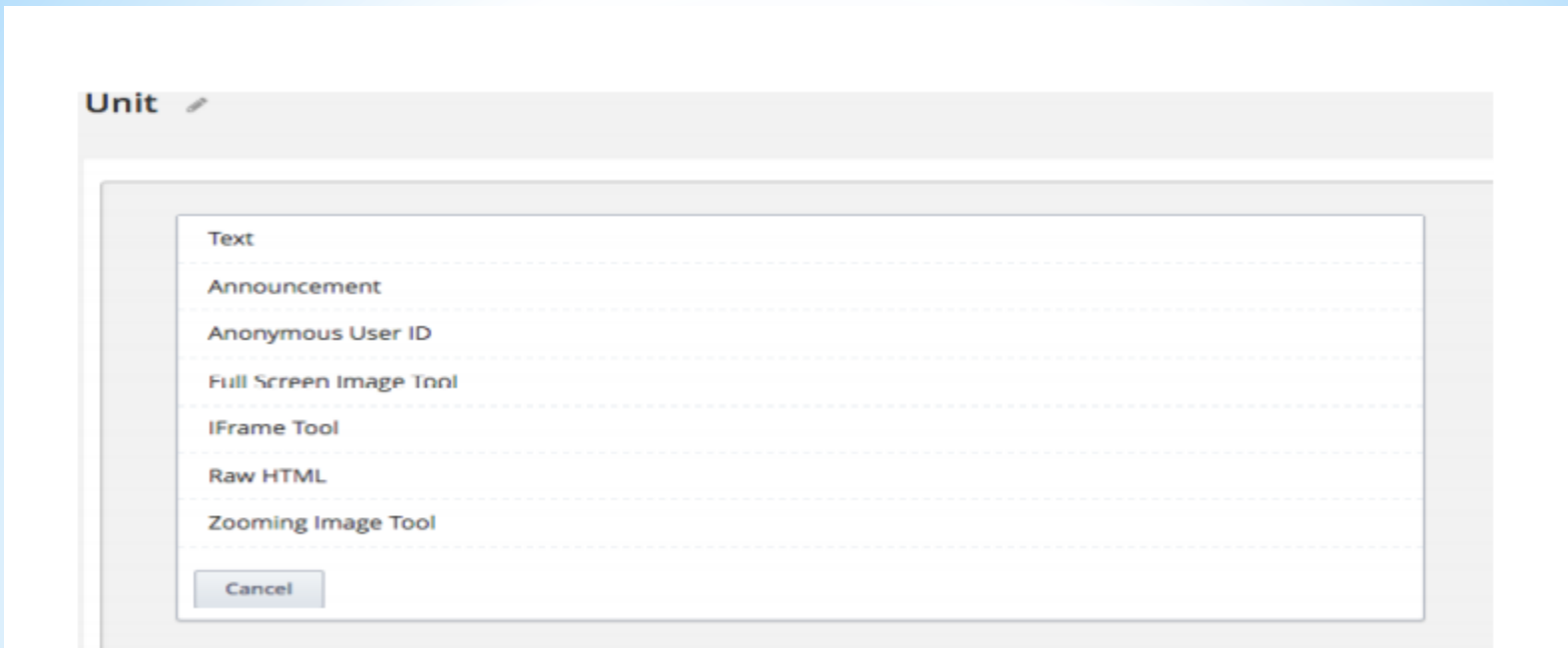
Creating unit :

Units can be created under subsection by simply clicking create new unit button . Inside one subsections multiple units can be created . The units are the the building block of the course . The units have four major components as seen in the picture below .



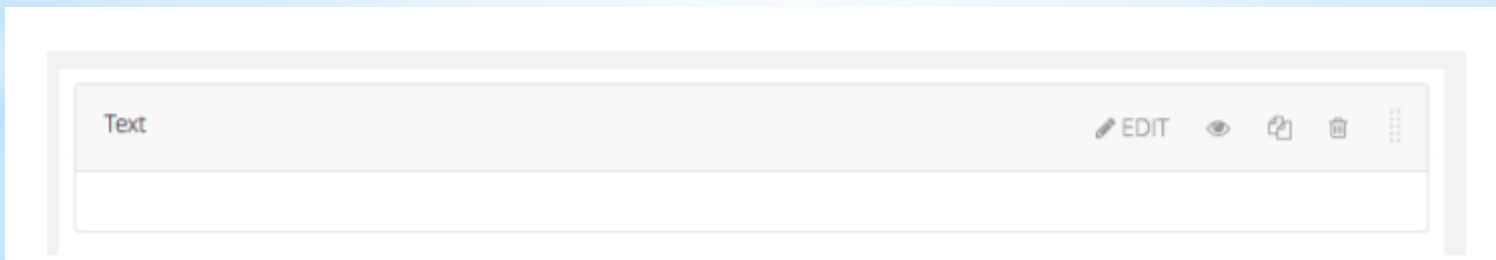
Picture 10 : component of a unit

As we can see in Picture 10, we can add four different components inside a unit . Among them the HTML component is the basic building block of a unit . When we click on HTML a list will be displayed . By selecting from the list we can add resources to the course .



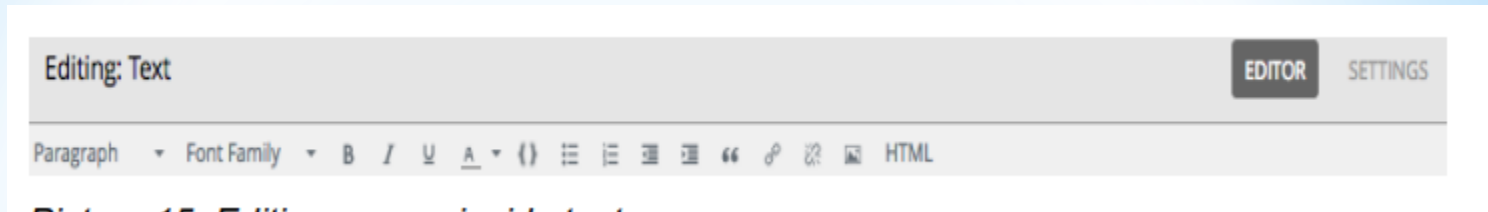
Picture 11: lists inside HTML components

In order to add the text to our course we should select a text from the menu . Which appears first in the menu as seen in picture 11 . After we select text , a blank component appears .



Picture 12: View of text inside HTML component

The component has a menu bar with options to edit , preview , copy or delete the component as shown in picture 12 . When we click on edit , the HTML component editor will open .



Picture 13: Editing menus inside text

As we can see from picture 13 , inside the text edit menu there are various options using which we can add and edit our resources. We can use the paragraph menu to structure our course text to headings and body . Similarly , we can choose font , bold the text , change texts to italics or add underline and also choose color . There is separate option to include the code block in our unit if needed . Apart from texts we can also add URL links in our unit using this edit option . Using the “insert picture” in the edit menu we can add pictures to our unit . After adding the resources we should save the change by clicking the save button .

Another important component of the unit is video . We can add videos to our course using this component . In order to add videos in our course first we have to post the video online in YouTube and create a link of the video in the unit using the video component . The video will play by the edX video player are .mp4 , .ogg and .mpeg format .

Once the video is posted in YouTube we can obtain the YouTube ID for the video from the URL of the video and then we can create a video component . An example of the URL of a video from YouTube is shown in the picture below .



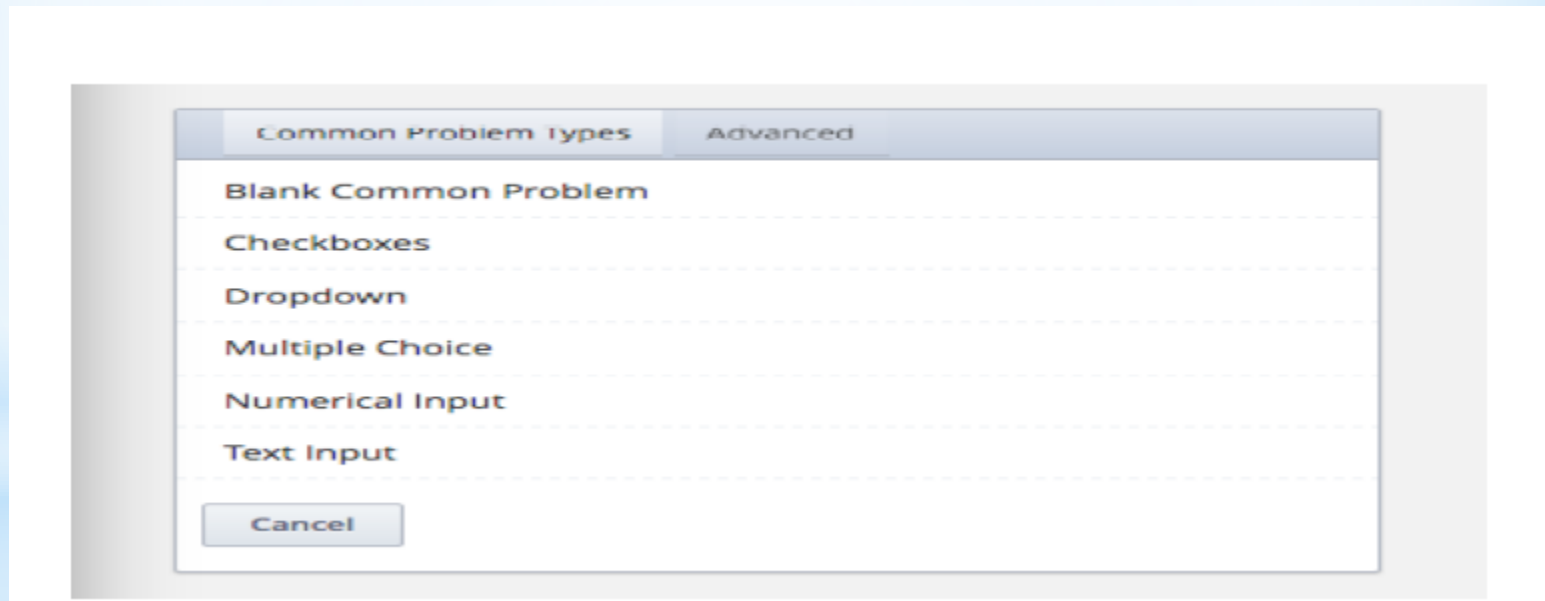
Picture 14: URL of a YouTube video

As seen in picture 14 , the YouTube ID of the video is Co7gQ6AMyTk . We have to use this part to link that video in our unit . In order to add the video we can click on the video component that appears when we add a new unit . Once we click on video a default video component appears .

Once we click edit , the video component editor will open with component display name and video URL for the default video . Once we provide a suitable name and change the default URL to the URL of the video we want , we can click on save to add our video component.

We can create a new discussion field in our unit using the discussion component . We can provide category , display name and subcategory to our discussion component .

In order to view the live discussions we can either click on preview or view live in unit settings . Similarly we can add problems to our resources using the problem component . We create simple problem , multiple choice , checkboxes , dropdown and numerical input using this component . To create a new problem we can simply click on the problem button in our new unit page . We can select the problem component type in the screen .



Picture 15: common problem types

As we can see from picture 15 , we can create various kinds of problems using the problem component . Once we select the desired option the editor will appear with default problems . We can just click edit and replace the default problems with the problems we want .

We can add as many components we want to the unit just by following the same method . We can also change the setting of the problems from the settings menu .

From the settings menu we can change the display name . Maximum attempts and weight of the problem . This will help in tracking the progress of the students .

Once we have added all the components we need in our unit we can check the preview of the layout of the course . We can drag and reposition the order of components if we want to before publishing the course .

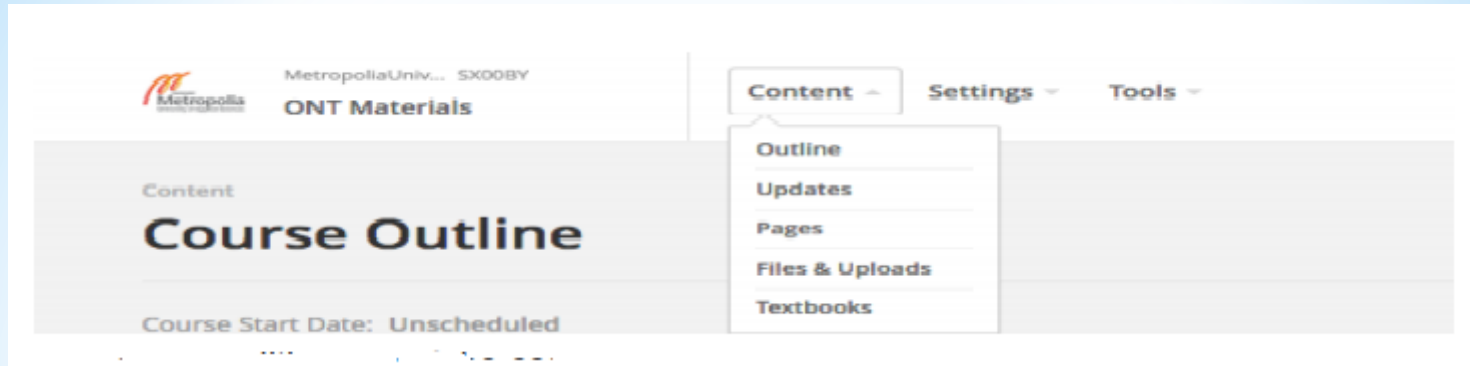
Visibility and welcome note :-

Once the course is prepared the author can control the visibility of the course . We can set the release data in each of the sections and subsections separately . Students will not be able to view the course before the release date . Similarly we can also set the visibility of the individual units to private or public . Only the public units are displayed to students and staff .

The private units are visible only to authors in the preview mode . In preview mode instructors are able to access the course regardless of the release dates or visibility settings .

But in the staff view and student view these setting will have an effect. Usually in the edX studio the visibility of every unit is set to private by default . So, we should remember to change the setting before publishing the course .

Once the teaching materials are ready we can add announcements , updates or welcome notes . Students will be able to view these announcements on the course info page . To add these updates we can click on the updates that appear in the course contents menu .



Picture 16: Editing bar of the course

After we click on the updates that appear in the content menu as shown in picture 16 , we can add new updates about our course .

Questions :

Q1: discuss Moodle software briefly .

Q2: define main homepage , menu , registration for moodle .

Q3: there are some advantages for moodle .
Explain that.

Q4: define the Metropolia edX and how it is work .

Q5: give the mission of edX organization .