

MULTIMEDIA COMMUNICATION

The Project







The evaluation method includes three components (one optional):

1. WRITTEN EXAM

- After the end of the lecturing period (weight 70%) – 23rd June. 11.30am and
- 8th July, 8am 2021;

2. PROJECT (in groups of 2)

- About a selected topic; to be finished by 28th May 2021 (weight 30%) with a
- preliminary table of contents by 30th April 2021

3. QUIZZ AT THEORETICAL LECTURES

The final mark is computed as:

$$***Final_Mark = round (0.7 \times Exam + 0.3 \times Project + Quizz Bonus)***$$

Objective



- ★ The project has the key objective to offer the students the opportunity to review a multimedia related topic that they like, thus asking for bibliographic review, company visits and contacts, product review, etc.
- ★ The objective should have a tutorial and pedagogic flavor on a topic related to multimedia communication; the content does not have to be original but rather a good review of the topic using appropriate references.
- ★ The project should 'push all the buttons' related to the topic, notably technology, business model, content, social and legal impacts, market, future trends.
- ★ Whatever the selected topic, the multimedia related aspects have priority over other issues.
- ★ The topic may be suggested by students although needing approval by the professor; there is a list of topic suggestions already available.
- ★ No topic may be selected by more than 2 groups; each group has 2 students.

Audience: Your Colleagues, Your Parents



Project Deliveries



The project will be delivered in two versions:

- ★ **Classic paper version (text)** using a template made available in advance, which should not be changed, with a maximum of 8 pages including everything
- ★ **Webpage version** essentially with the same content of the paper version while exploiting the typical capabilities of a web page, e.g. interaction, non-linear navigation, dynamic content like video
 - This version must include an exciting, *maximum 3-minute, video teaser for the topic*; no cuts and special effects are allowed; no slides may be used; both group elements must be speaking an equivalent time (the same language of the text)

Selecting a Topic



- ★ Interesting, exciting, future looking, building a portfolio, shaping your future
- ★ List of suggestions is provided
- ★ But you may choose anything you like involving multimedia ...
But I have to approve !
- ★ Not too generic ... Not too specific
- ★ **Be creative ! Surprise me (positively ;-)**
- ★ ...

Example Topics

- ★ Multimedia against COVID-19
- ★ YouTube
- ★ Skype
- ★ Netflix
- ★ Spotify
- ★ WhatsApp
- ★ Amazon multimedia
- ★ Facebook multimedia
- ★ Over-the-top multimedia
- ★ Multimedia in social networks
- ★ Personal audiovisual communications
- ★ Videosurveillance
- ★ Tablets
- ★ Royalty free video coding
- ★ Visual description and searching
- ★ Music description and searching
- ★ Interactive TV
- ★ Terrestrial TV
- ★ UHD TV
- ★ 3D TV
- ★ Video in the cloud
- ★ Internet video
- ★ Mobile video
- ★ 360 video
- ★ Virtual reality
- ★ Augmented reality
- ★ Light fields
- ★ Point clouds
- ★ Holography
- ★ Multimedia immersion
- ★ ...

amazon instant video

SHOWTIME

VUDU

HBO NOW

STARZ

hulu PLUS

NETFLIX

Apple iTunes

FANDANGO NOW

Google Play

sling TELEVISION

CINEMANOW

YouTube

PlayStation.Vue

facebook myBlogger flickr

amazonmusic vevo Spotify Qello Google Play Music tunein SHAZAM



LARGEST GLOBAL COMPANIES IN 2018 VS 2008:
SEVEN OUT OF TEN ARE NOW BASED ON PLATFORM BUSINESS MODELS

2018

RANK	COMPANY	FOUNDED	US\$bn
1.	 *	1976	890
2.	 *	1998	768
3.	 *	1975	680
4.	 *	1994	592
5.	 *	2004	545
6.	 腾讯 *	1998	526
7.	BERKSHIRE HATHAWAY	1955	496
8.	 *	1999	488
9.		1886	380
10.	J.P.Morgan	1871	375

2008

RANK	COMPANY	FOUNDED	US\$bn
1.	 PetroChina	1999	728
2.		1870	492
3.		1892	358
4.	 中国移动 China Mobile	1997	344
5.	 ICBC	1984	336
6.	 GGAZPROM	1989	332
7.	 Microsoft	1975	313
8.		1907	266
9.	 SINOPEC	2000	257
10.	 AT&T	1885	238

* Companies based on the platform model





Example Structure

1. Introduction
 1. Context, motivation, objective
2. Starting and Evolution (history)
3. Functional Description and Interfaces
4. Technology
 1. Overall architecture (with good figure)
 2. Technology 1
 3. Technology 2
 4.
5. Contents and Authors
6. Business Models
7. Competition and Market Dynamics
8. Social and Ecological Impacts
9. Legal and Ethical Impacts
10. About Portugal
11. Future Evolution

**Not
necessarily all
sections are
relevant for
all topics !**

**Adapt the
sections to
your topic !**

Where to Look for Material

- ★ Internet in general
- ★ IEEE Xplore
- ★ ACM Portal
- ★ DEEC and IST libraries
- ★ Other libraries
- ★ Journals, magazines, etc.
- ★ Professors from IST or other schools
- ★ Companies with activity in the area of the project



Video Production Rules



- ★ The video must appear in the home page of the project Web page
- ★ The video should be APPEALING and make people willing to see it up to the end of it and go to navigate in the Web page and read the paper
- ★ The video cannot use any slides
- ★ ALL the elements of the group must appear (one by one or all together) and speak in the video in rather equivalent times
- ★ During the full video, at least one element of the group must be present at any time
- ★ There should be NO video special effects in the video to concentrate on the oral message
- ★ The video may be shot indoors or outdoors
- ★ The presentation may be in Portuguese or English at your choice but all the elements of the group must speak the same language
- ★ The video should include NO offensive language in any form or to anybody



1. Structure of the paper

- Sequence of the sections; structure of the sections and subsections

2. Presentation of the paper

- Quality and clearness of the figures and charts; general look; usage of captions

3. Correct usage of the given template

- E.g. page, sections, figures and tables numbering; references along the text

4. Quality and clarity of the text

- Orthographic mistakes; clear and concise sentences; usage of structured text

5. Technical depth and correction

- Technical relevance of the topic; depth/simplicity/clearness of the concepts and methods; relevance given to the audio and video issues

6. Originality

- Any issue revealing originality to make the paper more appealing; creativity

7. Bibliography used and contacts made

- Quality and size of the bibliography; insertion of the references in the text

Evaluation Method: Project Self-Assessment

- ★ By the project deadline date, each student (not each project) will provide to a previously identified student representative, his/her ‘estimate’ of the mark for his/her project. The professor will have NO access to these ‘score estimates’.
- ★ The professor will score the projects in a 0-20 scale.
- ★ The students which estimated mark is **the same** as the professor’s mark will get a **bonus of 1 point** in the project mark.
- ★ The students which estimated mark is **± 1 point** regarding the professor’s mark will get a **bonus of 0.5 point** in the final project mark.



[Contexto e Objectivos](#)

[História](#)

[Programa](#)

[Corpo Docente](#)

[Horários das Aulas](#)

[Horários de Dúvidas](#)

[Material de Estudo](#)

[Método de Avaliação](#)

[Datas de Exame](#)

[Exames Realizados](#)

[Sobre o Projecto](#)

[Projectos](#)

Turnos de Laboratório

Resultados da Avaliação

[Para Relaxar ...](#)

[Sugestões](#)



Comunicação Multimédia

Comunicação Multimédia (CMul) é uma unidade curricular do Mestrado em Engenharia de Telecomunicações e Informática (METI), sendo o seu responsável o [Prof. Fernando Pereira](#).

Informa-se que a informação respeitante a classificações contida nesta página não tem qualquer valor oficial.

As aulas de CMul começam no dia 1 de Março, 2021 (2ª feira) às 15h, online.



TÉCNICO
LISBOA

Deadlines



- ★ **MARCH 26, 2021 (FRIDAY)** – Selection of the topic by the group (of 2)
 - Explicit topic approval required
- ★ **APRIL 30, 2021 (FRIDAY)** – Preliminary version of the table of contents in pdf file with a brief description of each section and sub-section (1-2 pages).
 - Detailed feedback will provided by email
- ★ **MAY 28, 2021 (FRIDAY)** – Final version of the paper and web page (with 3 min video).
 - Detailed evaluation report will be provided

An

EARLY START

is a

SMART

START

Start Early, Mature and Massage

- ★ Select your group partner
- ★ Select the topic and inform me
- ★ Start gathering material and reading
- ★ Create table of contents
- ★ Get feedback on table of contentz
- ★ Start writing by section
- ★ Integrate sections and ‘massage’

- ★ Create the website and video ...



MARCH 26, 2021: Selection of the Topic

*I will be right
here waiting
for you*