

Building  
Online  
Communities  
via  
Social Presence  
with  
TutorStack

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# 1. Building Online Communities

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SECTION ONE

## Osterman, 2000

A community exists when its members experience a **sense of belonging** or personal **relatedness**...

the community has a shared and emotional sense of **connection**

## Rovai & Wighting (2005)

Community “provides a place in which individuals are free to **express their identities**, and helps them deal with changes and difficulties in society at large.

Students who **feel lonely** or isolated **invest** more energy in **seeking a sense of community** and support than in learning.”

## Rosell, 2018

Without community, education is a **lonely** place.

Students **can't**:

- **work together** on group projects,
- **help each** other through tricky material
- or **share** their interest and passion for certain subjects.

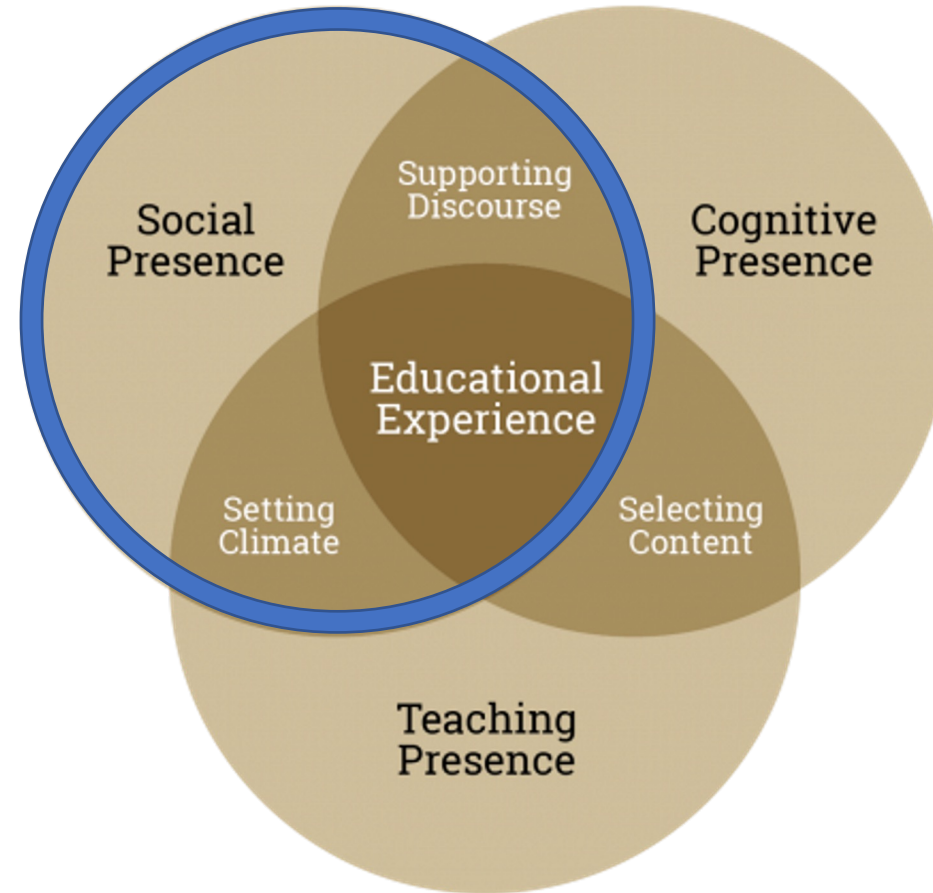
Learning communities play a significant role in ensuring that students remain **motivated** to succeed.”

# Importance of Classroom Community

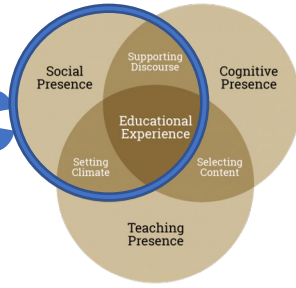
- **Isolation** leads to higher **dropout** rates  
(Ali and T Smith, 2015)
- Community creates a **better learning experience** for students  
(Wenger, 1998)
- Strong need for **Lecturer Presence**  
(Ladyshefsky, 2013)
- Importance of **Social Presence**  
(Garrison, 2000)



# Garrison, Anderson and Archer's Community of Inquiry



# Social Presence



## Definition:

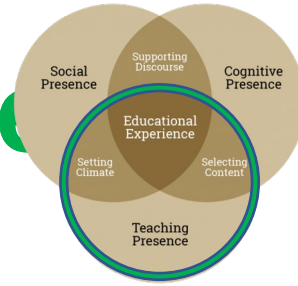
Ability to project the self socially and emotionally, thereby being perceived as **“a real person”** in mediated communication.

Consisting of:

- **Communication** – instructor & class
- **Interaction** - instructor & class
- Creation of a **learning community** throughout the term
- **Introduction > community > camaraderie**



# Teaching Presence



Consists of:

- **Instructional design**
  - different methods of providing content
- **Organization** of the course
- **Facilitation** of the discussion
- **Direct instruction** and **assisting students**
  - with questions and understanding
- Moving the discussion through the four cognitive phases

Teaching Presence:

significant factor in **student satisfaction** & perceived learning



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## 2. Social Presence

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SECTION TWO



# Social Presence

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Being perceived as **“a real person”** in mediated communication

Creating a sense of **community and connection,**

It is important especially at the **beginning of the semester** when students are getting to know and **trust** both you and one another.

If students can make **interpersonal connections** with others, they are more likely to engage with the course and the content.

Indicators of Social Presence include:

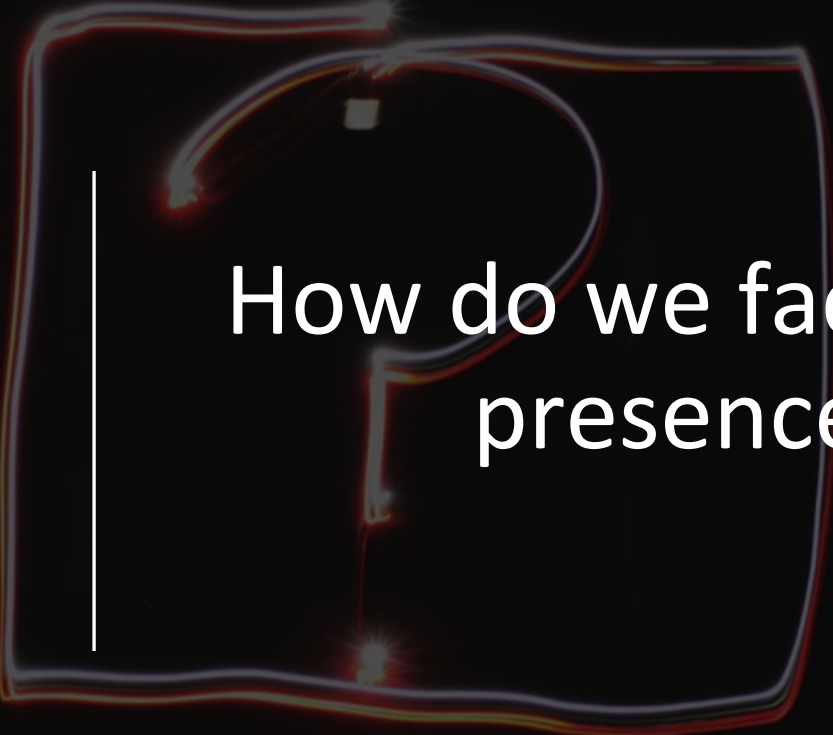
- **Affective responses** (emotion, humour)
- **Interactive responses** (adding to threads, asking Qs, agreeing)
- **Cohesive responses** (using students names, small talk)

# Social Presence – Defined / Measured

- **Short, et al. (1976)** relates two types of behaviours to social presence:
  - ‘**intimacy**’ developed by Argyle & Dean (1965);
  - and ‘**immediacy**’ developed by Wiener & Mehrabian (1968).
- Kreijns, Xu and Weidlich (2021)
  - 28 definitions & 21 measures of Social Presence

Abdullah (2004)	Gunawardena and Zittle (1997)	Picciano (2002)	Whiteside (2017)
Arbaugh et al. (2008)	Hassanein and Head (2007)	Ogara et al. (2014)	Sallnäs (2005)
Belderrain (2006)	Jung et al. (2002)	Remesal and Colombian (2013)	Shin (2013)
Biocca et al. (2001a)	Kang et al. (2007)	Russo (2000)	Tu (2002a)
Garrison (2009)	Kim (2011)	Short et al. (1976)	Tu and McIsaac (2002)
Garrison et al. (2000)	Kozan and Richardson (2014)	Sung and Mayer (2012)	Walther (1992)
Gunawardena (1995)	Moreno and Mayer (2004)	Swan and Shih (2005)	Yen and Tu (2008)

**How?**



How do we facilitate this social presence in online?

# What?

We need a **single**  
Community Platform  
for **all** students and lecturers

# Why?

- One Stop Shop for all lecturer communications with a class
- Lecturer included in conversations
- A place for students to talk about course material
- Peer support for material
- Real-time messaging

# Why?

- Desktop and mobile apps

- Notifications

- Can be used for synchronous and asynchronous classes

- Supports Teacher Presence

- Supports Social Presence



Which  
?



**slack**



# 3. TutorStack

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








SECTION THREE

# TutorStack

- A **framework** supporting blended, online and digital learning **BOLD**
- with simple **insights** from learning analytics,
- representing an **unbundling of the LMS**,
- with **open, free, or low cost** solutions
- **without** product or vendor **lock-in**.
- It affords good **online teaching competencies**, and **single person operation**



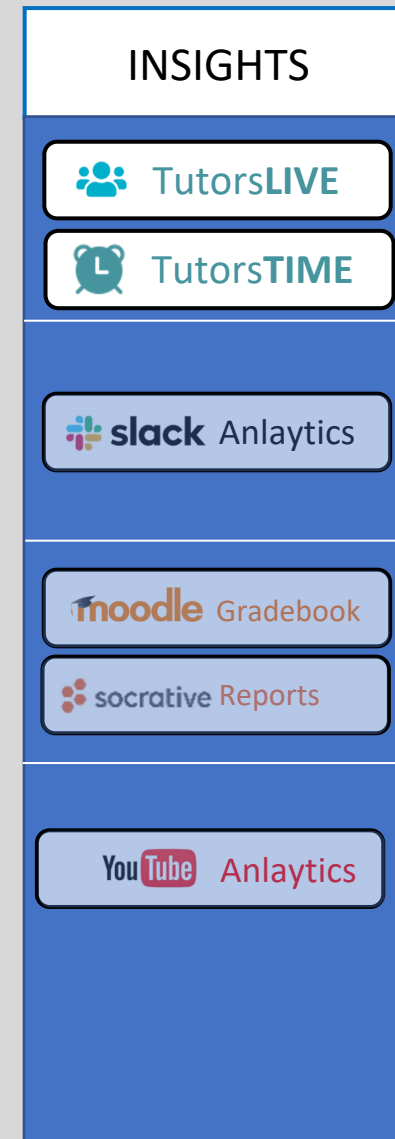
## Contributors

 <b>Eamonn de Leastar</b> SETU	 <b>Colm Dunphy</b> SETU	 <b>Jordan Harrison</b> Charles River Labs	 <b>Emma Kidney</b>	 <b>Ellen O'Carroll</b> Red Hat
 <b>Pete Windle</b> SETU	 <b>David Fan</b> Red Hat	 <b>Bernard Thompson</b> Kargo	 <b>Leigh Griffin</b> Red Hat	 <b>Evgeniy Dainovich</b>
		 <b>Josh Bennett</b>		



OBJECTIVE	FACILITATED BY
(1) create a <b>MOOC</b> like online experience for a smaller private group ( <b>SPOC</b> )	Entire framework
(2) use a <b>single platform for communication</b>	Slack
(3) use a content management system with a consistent and intuitive <b>user-experience</b>	Tutors
(4) facilitate the creation of purpose built step-by-step ( <b>constructivist</b> ) <b>guides for labs</b>	Tutors
(5) maximise flexibility of delivery by accommodating different modes of learning, synchronous, asynchronous and self-directed using a <b>similar workflow</b>	Entire software framework
(6) facilitate streaming live and recording in Full High Definition (FHD) <b>video content</b> with the <b>optimal</b> playback options and interactions	Media Layer, PODs
(7) utilise <b>open, free, effectively free, or minimal cost</b> tools and technologies	Entire software framework
(8) <b>simplify the production</b> of high quality content enabling teachers spend more time enhancing student experience	Tutors
(9) facilitate providing <b>on-demand lab support</b> outside of office hours for student's convenience	Slack
(10) capture and reveal to students and instructors, <b>student interaction patterns</b>	TutorsTIME
(11) and simulate <b>social aspect</b> of a live classroom experience to promote a sense of <b>community</b> and collective effort online	TutorsLIVE Slack

# TutorStack2022



Learning Analytics

[bit.ly/tutorstack](https://bit.ly/tutorstack)

<https://tutors.dev/>



# HDip in Computer Science (online)


## #famous-five



# PROGRAMME

Semester 1: January-June 2021

Workshop One  
Life etc...  
Web Development  
Programming  
Semester 1 Schedule



induction - structure - schedules - handbook

Semester 2: June-December 2020

Workshop Two  
ICT Skills



Introducing semester Databases & Computer Systems - project &...

Semester Three





Workshop Three  
Full Stack Development



agile methods - cv preparation - introducing semester 3

Semester 4: June-December 2021

Workshop Four  
ICT Skills 2  
Mobile App Development  
Semester 4 Schedule



Introducing semester 4, Project, Placement

javascript - SPA - react - APIs - front-end

layouts - activities - resources - lifecycle - widgits - ux

timetables - semester calendars - assessment schedules

Layout

Toggles

Dark Mode

Compact

Themes

# MODULE

Programming Fundamentals  
Colm Dunphy, Peter Windle, Conor O'Neil, WIT

00: Induction



module structure - delivery approach - java programming language ...

01: First Contact



processing - java - drawing shapes - colour - grayscale - RGB - syntax errors ...

02: Selection and Iteration



animation - conditional relationships

04: Classes  
Programming Fundamentals

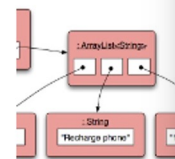
4b: Classes (Part 2)

07: IntelliJ and Basic I/O



IntelliJ - Java Virtual Machine (JVM) - main method - Scanner - OO...

08: Grouping Objects



primitive arrays - class algorithms for collection ArrayLists

# WEEK CLASS

Higher Diploma in Computer Science  
**Programming**



Watch on YouTube

Online Class Talk 4b Wed 15-02-2023 12:15 PM

INTRODUCTION  
summary of last class - Strings - classes/objects

Behaviour in Classes  
classes - methods - behaviours - overloading - validation - this

Classes and Objects  
classes - encapsulation - access modifiers - public - private - accessors - get

SUMMARY & CLOSING  
Behaviours - Encapsulation - Accessors & Mutators - Validation - A1 Handue...

Lab-04b  
classes - methods - behaviour - overloading - validation - this...

HangBack Session  
Zoom Meeting ID: 621 2277 3199

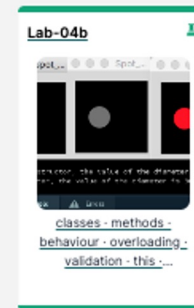
Quiz  
Socratic Room: PROG04B

Zoom - Live Q&A Session [1 hour]  
Time: Feb 15, 2022 08:00 PM. Q&A for Assignment 1 Rubric.

Video  
Slides  
Lab



Online Class Talk 4b Wed 15-02-2023 12:15 PM



“CONTENT”

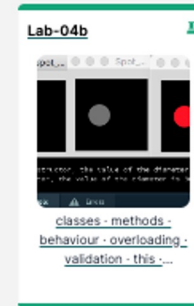
“Lab”

Chapterized  
Video



Online Class Talk 4b Wed 15-02-2023 12:15 PM

Broken into smaller  
Videos on cards  
with related content



“CONTENT”

“Lab”

Welcome  
Last Week  
Key Posts

Summary  
Advice  
Invitation

“Hangback” “Quiz” “Assignment  
Q&A Session”



## Calendar



# TutorsTIME

## Summary

TIME	DMIT Last Accessed	Attendance	Induction	Lab-1a	Lab-1b	Lab-02a	Lab-02b	Lab-03a	Lab-03b	Lab-04a	Lab-04b	Lab-05a	Lab-05b
1381	2/20/2021 18:46:54 GMT+0	788	34	70	68	118	111	103	109	0	0	0	0
905	2/20/2021 0MT+0000 (0h)	54	44	44	44	0	0	174	170	188	205	100	0
1317	2/20/2021 21:29:16	179	179	71	51	196	179	150	151	88	117	119	0
1977	2/20/2021 7:36:15 PM	132	137	23	32	228	227	241	210	85	128	84	0
1930	2/20/2021 0MT+0000 (0h)	379	191	168	171	171	284	173	238	85	198	84	0
1984	2/20/2021 10:03:20 PM	124	0	91	170	381	295	179	210	87	83	44	4
1414	2/20/2021 9:42:00 PM	789	31	91	88	207	447	111	89	10	64	0	0
848	2/20/2021 22:23:00	44	0	81	58	91	101	54	20	21	88	44	1
1082	2/20/2021 00:09:31	113	84	95	189	276	83	151	61	47	44	1	0
1128	2/20/2021 0MT+0000 (0h)	341	81	100	141	50	50	354	0	0	0	0	0
2971	2/20/2021 20:02:22	242	178	110	126	711	677	410	312	61	188	0	0
795	1/15/21 0MT+0000 (0h)	142	142	0	53	117	0	88	58	54	0	0	0
810	2/20/2021 19:31:42	142	0	50	54	95	95	64	64	58	0	0	2
1478	2/20/2021 0MT+0000 (0h)	67	142	0	64	759	61	131	73	80	58	0	0
791	2/20/2021 16:53:38	213	91	2	54	104	227	54	0	44	0	0	0
1320	3/5/21 0MT+0000 (0h)	228	147	51	65	162	100	137	110	68	0	0	0
2530	2/16/21 0MT+0000 (0h)	120	213	238	145	312	164	791	0	227	0	0	0
800	2/20/2021 6:07:51 PM	0	111	131	58	0	95	58	0	0	0	0	0
1223	2/20/2021 22:32:54	63	126	60	210	238	276	58	128	0	0	0	0

Identify students needing **INTERVENTIONS**

# TutorsLIVE

Eamonn de Leastar  
Appear Offline

Programming Fundamentals Live  
Tutors Live Laboratory

19 Online

Joe 12:38:55  
05: Arrays Lab-05a

Mary 12:47:54  
04: Classes Lab-04a

Mike 12:39:14  
05: Arrays Lab-05a

**Who** is working on the course (remotely) **right now?**  
**What** are they working on?  
 Maybe we can chat about Lab4 – Exercise 2?

# Companion Apps

- Although available for the entire programme.
- Used to just run the applications.
- Now configurable, customised for each module

## Slack Course Workspace

## Socrative LIVE ROOM

in which quizzes are teacher paced for live classes.

Cards for each class have the alternative **ON DEMAND ROOM** links for each class which are Student paced. Recreates the Live Experience on Demand



Zoom Hangback /  
Q&A Session for the  
module

## Moodle topic for the module

Moodle is configured as a single module for the entire programme (only used for summative assignment submissions).

## YouTube Playlist

for the module for a specific cohort

# Building successful online communities using Social Presence

Balance of sync & async

- E.g. Synchronous at start. Facilitate similar experiences

Upload materials in advance of live sessions

- E.g. Weekly release at start of the week with announcement

Communicate clearly

- E.g. All Communications in one place

Informal videos / Sessions

- E.g. Weekly intros, #Life Etc., Time management, Social events

Smaller chunks

- E.g. Card Videos, chapterising videos

Design online activities to replicate incidental offline moments

- E.g. Hangbacks, virtual coffee breaks, Onsite Workshops

Find ways to connect with students

- E.g. Tutors Live (see students online – send DM)

Identify students who are struggling

- E.g. Tutors Time Insights (interventions)

# But start here...

1. Students need to be **invited**
2. **Download the app** and login
3. Establish the **instructor's presence**
  1. Teach how to use through posts
4. Create **personal profiles** and **photos**
5. Use simple **Ice Breaker** – introductions
6. Use **announcements to build rapport**
7. **Share Stories** - #Watercooler
8. Promote **Asking Qs**
  1. "Getting over yourself"
  2. – DMs/public
9. **Real-Time** synchronous discussions
10. Be **responsive** to students needs



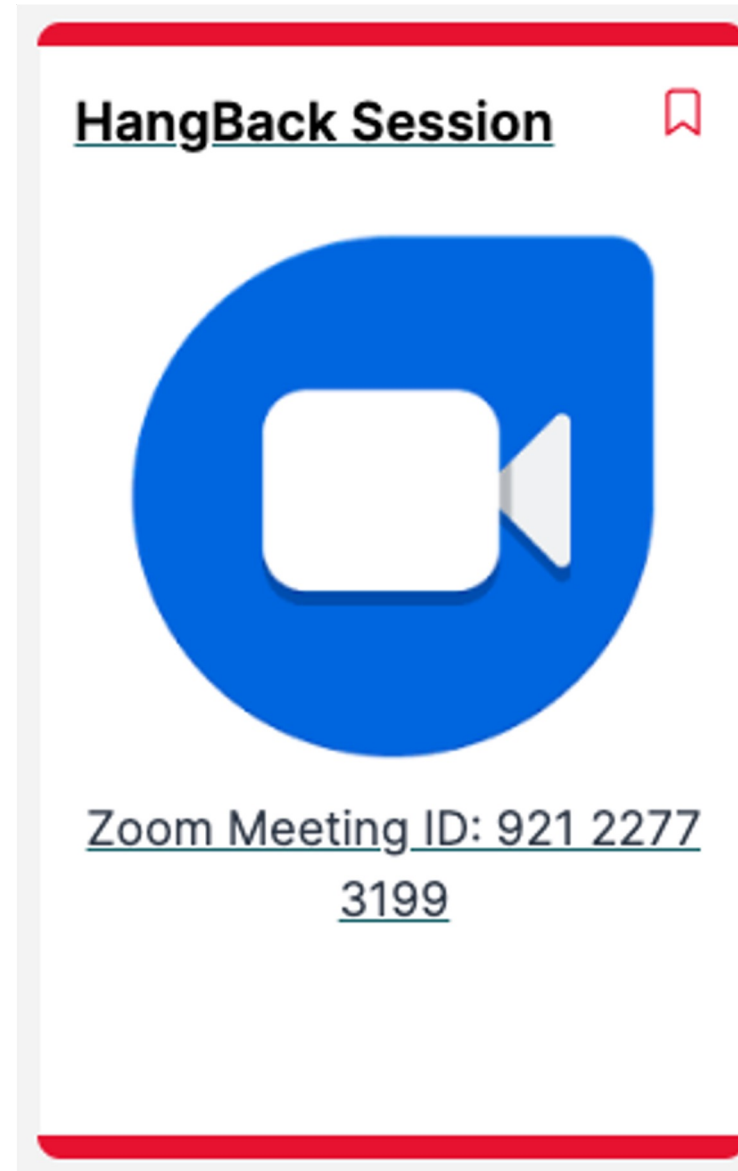
# Then Later...

1. Netiquette - **messages** that are respectful, positive, encouraging, timely, and frequent
2. Promote **peer learning**
3. **Blogging**
4. Self & Peer Review with clear **Rubrics**
5. Use **video feedback**

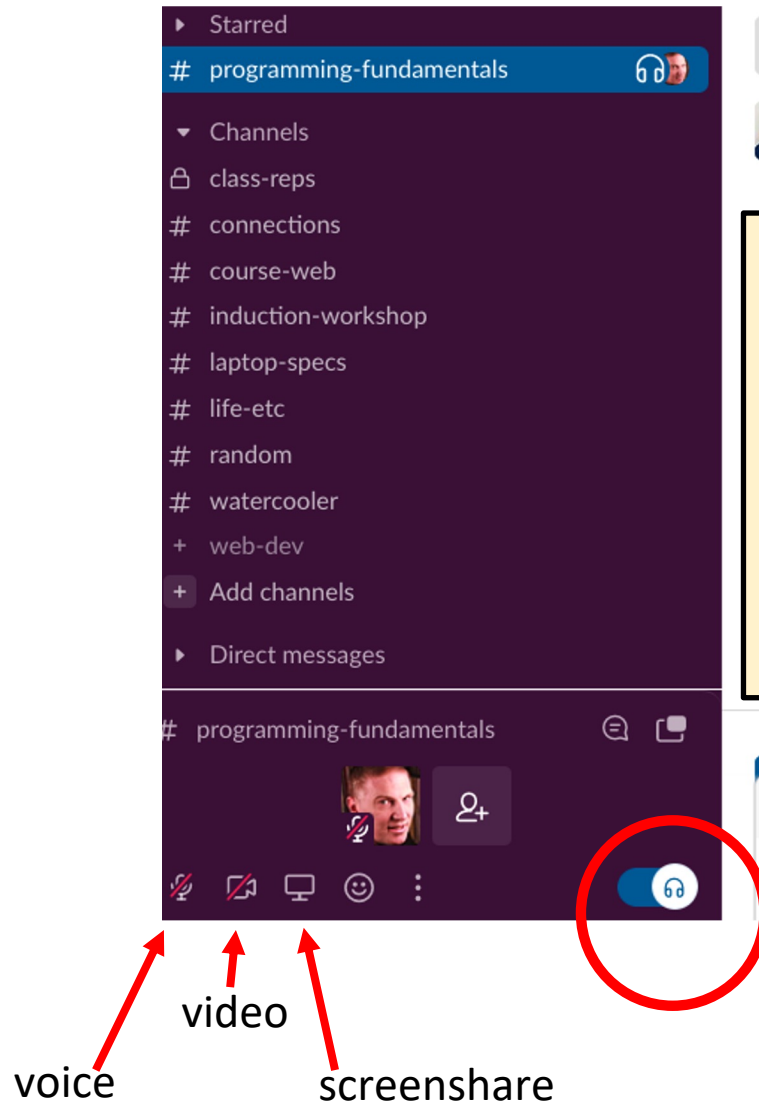


Some Examples

**Hangback  
Sessions**  
– after class



# Huddles – During a live streamed class



**A huddle happened** 8:12 PM  
Peter Windle (SETU Lecturer) and 2 others were in the huddle for 53m.

**Peter Windle (SETU Lecturer)** 8:18 PM  
👉 The huddle has started if anyone has any questions.  
ps. I'm happy to answer any Assignment 2 questions tonight too (edited)

While a live class is being streamed in YouTube (7 sec delay)

Students can start a huddle and talk between themselves (facilitating the rumble from f2f classes but without the teacher being distracted)

A rapoteur can type any questions into the channel if verbal questions can't be answered by the group

**You joined the huddle** LIVE 7:18 AM

B I

Message #programming-fundamentals

Start/stop huddle

# Homework Threads



**Colm Dunphy** 4:48 PM

I would encourage you to do the **lab1a** tonight or tomorrow (at least the steps).

You might like to post your exercises and challenge outputs in the threads below as you get round to them (edited)



5



**Colm Dunphy** 4:49 PM

Microsoft-Logo (edited)



35 replies

Last reply 2 months ago



**Colm Dunphy** 4:49 PM

Beats by Dr.Dre



37 replies

Last reply 2 months ago



**Colm Dunphy** 4:49 PM

Microsoft Logo greyscale



35 replies

Last reply 2 months ago



**Colm Dunphy** 4:50 PM

Media Player



32 replies

Last reply 2 months ago



# Collaborative Posts (Summarising class)



**Colm Dunphy** 4:04 AM

Post ▾



**Week 3 - Methods**

Post

Calling all students - please edit this post

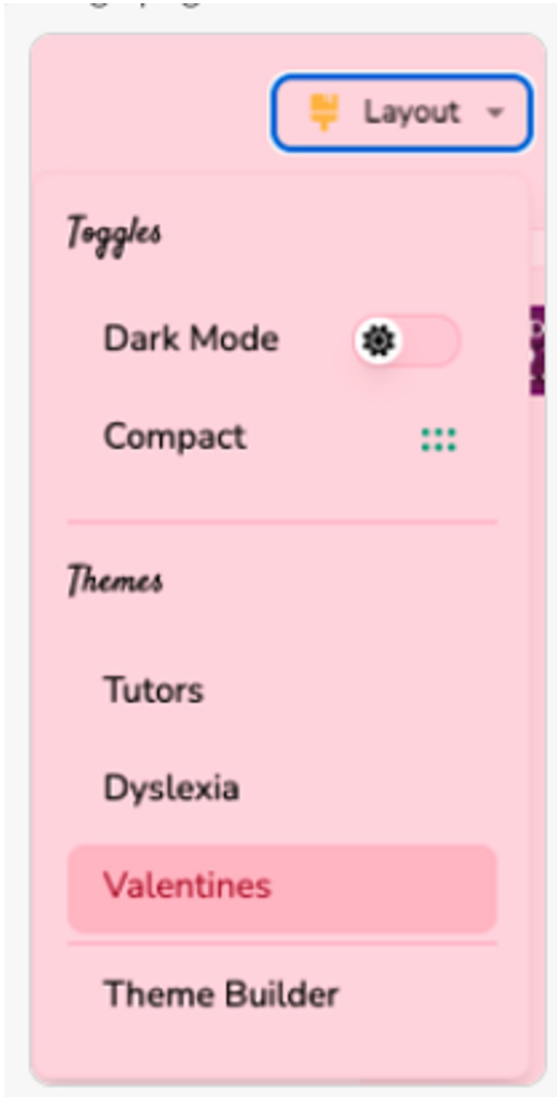
**Monday 3a**

Please contribute to the summary of the class - by editing this post

We learnt about how to create & call our own Methods (or functions). Methods can be passed values and return values.

The Mouse event handlers (Methods) are **Clicked, Pressed, Released, Moved &**

# Themes



# #watercooler

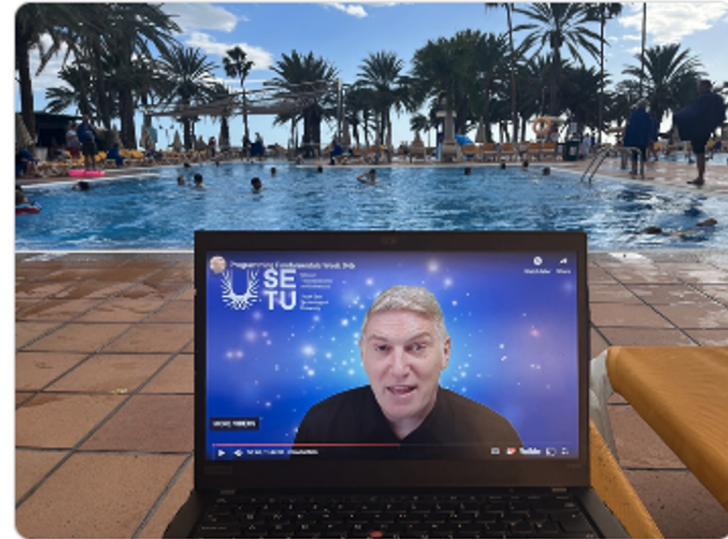
- Student post while on holidays

Thread #watercooler



  ago  
**@Colm Dunphy (SETU Lecturer)** Great Lecture on Wednesday

HowITShouldBe.png ▾



 9  1  2  1 

1 reply



**Colm Dunphy** 24 days ago


“Coming to a multinational swimming pool in your country...this is Programming fundamentals LIVE from Waterford Ireland”

 5 



# #connections

Thread  
#general


Pinned by Colm Dunphy (WIT Lecturer)


 **Colm Dunphy (WIT Lecturer)** Dec 17th, 2019 at 10:42 AM  
Welcome to Slack everyone.

It's great that you are posting messages already. We'd like to encourage this new community and invite you all to give a short and simple one sentence biography of yourself. But we'd like to keep all your responses together (before it gets mad!). So, if you hover over this message you can start a thread or reply to a thread. (edited)

 1 

49 replies

 **Colm Dunphy (WIT Lecturer)** 5 months ago  
Hi I'm Colm, I'm 48 married with 4 kids, and work full time at WIT, I'll be teaching you Programming Fundamentals (edited)

 **Student A** 5 months ago  
Hi all, my name is Student. I'm an IT technician, looking forward to starting the course in January!



Thanks

# The Practical Guide

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