ESSEX CHALLENGE 2.0

"WHEN WHAT WHERE"

VISHWANATHAN MOHAN
CHALLENGE WEEK 2.0-

WE WANT YOU TO ENJOY IT!!

INFORMAL- FEEL FREE TO ASK ANYTHING!!

IF YOU NEED ADDITIONAL SUPPORT PLEASE CONTACT ME (DR. VISHUU MOHAN) OR PROF FRANCISCO SEPULVEDA

vm16090@essex.ac.uk
f.Sepulveda@Essex.ac.uk
CHALLENGE WEEK - HISTORY

WE HAD THE FIRST EDITION LAST YEAR

SLOGAN ????
Challenge Week - History

We had the first edition last year.

Impossible is nothing! Is our mission statement.

The event won the 2018 Excellence in Education Award of the university.

Because of
Challenge Week - History

Last year we had the first edition

Impossible is nothing! Is our mission statement

The event won the 2018 Excellence in Education Award of the University

Because of

The students (like you) who gave their energy, creativity and hardwork
THE ESSEX CHALLENGE

OCT 9-13, 2017

CSEE DEPARTMENT
UNIVERSITY OF ESSEX
IT'S YOU—WHO BRING THE ENERGY, CREATIVITY AND HARD WORK..

THIS YEAR ????

LAST YEAR 1 2 5 10

VOTING
CHALLENGE WEEK 2.0-

THIS YEAR-> CSEE+ TALENT DEV CENTRE + SU + LIBRARY + STARTUP HUB + LTT+ SEVERAL EXTERNAL SPEAKERS + 40 STAFF + 400 NEW STUDENTS - REALTIME, ALL OVER THE CAMPUS

WE NEED TO ORGANIZE OURSELVES!!

HOPEFULLY, IT WILL BE FUN..., WE WANT YOU TO ENJOY IT!!

INFORMAL- FEEL FREE TO ASK ANYTHING!!

IF YOU NEED ADDITIONAL SUPPORT PLEASE CONTACT ME OR PROF FRANCISCO SEPULVEDA
TO GET STARTED

• BY USING MAGIC, WE HAVE DIVIDED YOU IN 60 TEAMS OF 6 PEOPLE EACH

• TEAM NAMES – A1, A2, ….. A60

• ALL OF YOU SHOULD HAVE BEEN ASSIGNED A TEAM

• IN THE NEXT HALF HOUR - GIVE YOU AN OVERVIEW OF WHAT WE ARE GOING TO DO TOGETHER FOR THE REST OF THIS WEEK...

DON’T WORRY IF YOU MISS ANYTHING- MY SLIDES WILL BE AVAILABLE IN MOODLE PAGE OF ESSEX CHALENGE

YOU CAN ALSO USE THE LISTEN AGAIN
**IF YOU STILL DO NOT KNOW WHICH TEAM YOU ARE IN**

- **CHECK YOUR EMAIL (ROB - PROJECT WORKER - CHALLENGE WEEK GROUPING)**
- **GO TO CHALLENGE WEEK MOODLE PAGE - THE FILE IS AVAILABLE THERE**

<table>
<thead>
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<td><strong>ARNOLD, MEGAN</strong></td>
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</tbody>
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**Search for your name**

**If you don't find your name - email me and Rob Smith...**
Welcome to Essex Challenge Week

#makesomethingwonderful

Challenge Week 2018 Timetable
Challenge Week 2018 Team List
Programming Quiz
Maths Quiz 2018
Games Challenge Tutorial 2018
Chatbot Warfare Challenge Tutorial
Robotics Challenge Tutorial 2018
Plane Hacker Challenge 2.0
Maths Quiz
Ice Breaker Challenge Submission
Core Team Challenge Briefing

This quiz has been designed to assess your understanding. This assessment is for your own benefit and therefore you should attempt to do this without any assistance from a calculator, the internet or with help from peers.
CHALLENGE WEEK 2.0- WHY

ICE BREAKER CHALLENGES

Fun way of getting to know each other, the school, research facilities, university

KEYNOTE EVENTS, WORKSHOPS

THE FUTURE- What’s hot and happening in computer science, AI, electronics, robotics, games..

How to gain LEADERSHIP in business

CORE SKILLS FOR 21ST CENTURY like team work, presentation, critical thinking, people management
CHALLENGE WEEK 2.0- WHY

TECHNICAL CHALLENGES

in 2020
1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

in 2015
1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity
A document will be up in Moodle on the vision and how CEIOI-201-301 are connected....
CHALLENGE WEEK 2.0 - WHY

TECHNICAL CHALLENGES

**in 2020**
1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
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**in 2015**
1. Complex Problem Solving
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6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity

DISCOVER THE INVENTOR

PRODUCT BUILDING

Learn → Idea → Build

Data → Measure → Product
In addition to the prizes to be won, activity in Week 2 involves:

- 10% of your course work marks for the CE101 Professional Development module
- If you complete all the tasks, you get full marks...by next Tuesday
- Challenges designed - no prerequisite knowledge, adequate support
- Challenges designed - they are enjoyable, develop curiosity to learn more
TODAY’S MENU

11.45-12.00  SUSPENSE......(HOPE IT’S A GOOD ONE.....!!)
12.10- GROUP PHOTO, SQUARE 1
12.30-13.30  TEAM MEMBERS MEET (HOW?)
TODAY’S MENU

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AT THE MOMENT ALL OF YOU ARE RANDOMLY
SEATED AND MIGHT NOT HAVE MET OTHER
MEMBERS OF YOUR TEAM
TODAY’S MENU

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12.30-13.30  TEAM MEMBERS MEET (HOW?)

AT THE MOMENT ALL OF YOU ARE RANDOMLY SEATED AND MIGHT NOT HAVE MET OTHER MEMBERS OF YOUR TEAM.

NEED YOUR HELP!!

A1  A2
A3  A4
A50
WE WILL DO IT IN 2 GROUPS IN THE STEM BUILDING

12.30-1 PM  TEAMS A1-A30
1-1.30 PM  TEAMS A31-A60

THREE MEETING POINTS IN THE STEM BUILDING (ACADEMIC STAFF WILL GUIDE YOU ONCE YOU REACH THE STEM BUILDING)

A1-A10- FIRST MEETING POINT (STEM EVENT SPACE)
A11-A20- SECOND MEETING POINT (STEM EXPLORATIVE SPACE)
A21-A30- THIRD MEETING POINT (STEM LAB)

SIMILARLY, A31-A40 FIRST MEETING POINT, A41-40 - SECOND MEETING POINT FOR 1-1.30 PM

WHEN YOU REACH THE MEETING POINT----------LIVE DEMO
WE WILL DO IT IN 2 GROUPS IN THE STEM BUILDING

12.30-1 PM   TEAMS A1-A30
1-1.30 PM     TEAMS A31-A60

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SIMILARLY, A31-A40 FIRST MEETING POINT, A41-40 - SECOND MEETING POINT FOR 1-1.30 PM

WHEN YOU REACH THE MEETING POINT----------LIVE DEMO

IF WE ARE WELL ORGANIZED, WE CAN GET THIS JOB DONE IN 10 MINS, BUT GOOD CHANCE TO MEET ACADEMICS TOO..
At the entrance of STEM- you will find Rob (Project Worker)

- Everyone should collect your lanyard

Do not lose it

You need to give it back on Friday during presentations
TODAY’S MENU

13.30 PM - END OF TODAY

QUESTIONNAIRES

TAKEN INDIVIDUALLY (ONLINE IN MOODLE), LINKS WILL BE ACTIVE IN CHALLENGE WEEK MOODLE PAGE

- PROGRAMMING APTITUDE QUIZ
- MATHEMATICAL APTITUDE QUIZ

P.S. DO IT BY THURSDAY 11 PM (NOT MORE THAN 1 HOUR)

DATA WILL ALLOW US BRING IN SUPPORT AS NEEDED

2% - IF YOU TAKE THE TEST, YOU GET THE MARKS
TODAY'S MENU

13.30 PM - END OF TODAY

SCAVENGER HUNT (EXPLORE 5 INTERESTING PLACES IN THE CAMPUS)

• EVERY TEAM WILL VISIT 5 LOCATIONS (THERE WILL BE STAFF MEMBERS TO HELP)
• START UP HUB, 1SPACE, SU STAND, SPORTS ARENA, CENTRAL LIBRARY
• EACH LOCATION WILL HAVE A CLUE RELATED TO A FAMOUS PERSON
• USE THE 5 CLUES TO FIND WHO THE SCIENTIST IS AND PUT HIS NAME/PHOTO IN YOUR PRESENTATION FOR FRIDAY
TODAY’S MENU
13.30 PM - END OF TODAY

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SPORTS ARENA WILL HAVE CHARLIE WITH HIS TEAM TO TEACH JUGGLING

Charlie Hull

Charlie Hull, a founder of Flax, keeps a strategic view on developments in the search industry, and is in demand as a speaker at conferences across the world. Charlie writes and comments regularly on search issues and runs several networking groups. Charlie is the Managing Director of Flax.
(more...)

About Grip Circus Theatre

Grip was founded in 1998 by Charlie Hull who continues to run the company with the assistance of other workshop leaders and performers.
TODAY’S MENU

13.30 PM - END OF TODAY

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EXAMPLE

- Location 1 - I have won the Nobel Prize in Medicine and studied animal behavior
TODAY’S MENU
13.30 PM - END OF TODAY

SCAVENGER HUNT (EXPLORE 5 INTERESTING PLACES IN THE CAMPUS)

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EXAMPLE

• Location 1 - I have won the Nobel Prize in Medicine and studied animal behavior
• In my research, I built dummy butterflies with interesting markings- to fool male butterflies to come and mate with them
Location 1 - I have won the Nobel Prize in Medicine and studied animal behavior.

In my research, I built dummy butterflies with interesting markings - to fool male butterflies to come and mate with them.

I also created big plaster eggs to fool seagulls to sit on it - and it works!
TODAY'S MENU
13.30 PM - END OF TODAY

SCAVENGER HUNT (EXPLORE 5 INTERESTING PLACES IN THE CAMPUS)

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- I also created big plaster eggs to fool seagulls to sit on it - and it works!
- My brother won the Nobel Prize in Economics
TODAY'S MENU
13.30 PM - END OF TODAY

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EXAMPLE

- Location 1 - I have won the Nobel Prize in Medicine and studied animal behavior
- In my research, I built dummy butterflies with interesting markings- to fool male butterflies to come and mate with them
- I also created big plaster eggs to fool seagulls to sit on it - and it works!
- My brother won the Nobel Prize in Economics
- We are the only siblings in history to both win Nobel Prize

EVERY TEAM WILL HAVE A DIFFERENT PERSON- SO COLLECT THE CLUE FOR THE PERSON YOU ARE LOOKING FOR!!!
WHEN YOU REACH THE LOCATION...
### Scavenger Hunt Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Location 1</th>
<th>Location 2</th>
<th>Location 3</th>
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<td>3:30-4</td>
<td>ISPACE</td>
<td>SU</td>
<td>2:30-3</td>
<td>1:30-2</td>
<td>Time</td>
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<td>SU</td>
<td>2:30-3</td>
<td>1:30-2</td>
<td>A1-A12</td>
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<td>1:30-2</td>
<td>A13-A24</td>
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<td>1:30-2</td>
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<td>SU</td>
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<td>A49-A60</td>
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**Teams:**

- Stand-Square 3

**5 Locations, 5 Clues, 30 Min Slots**

**Notes:**
- SU: Standing Order
- ISPACE: Information Space
- Library: Library
- Juggling: Juggling
- Start Up: Start Up
2 SECONDS/DAY VIDEO COMPETITION RUNS ALL DAYS

PRIZE FOR BEST 2SEC/DAY VIDEO

EVERY TEAM WILL HAVE 10 SECOND VIDEO OR PICTURE SLIDE SHOW AT THE END OF THIS WEEK
FROM TUESDAY TO THURSDAY-

• **KEYNOTE EVENTS** IN THE IC LECTURE HALL

• **TEAMS WORK ON** **CORE CHALLENGES** (IN VARIOUS LABS)
KEYNOTE EVENTS

KEYNOTE LECTURE 1 (TUESDAY 2PM, IC HALL B)
HOW TO THINK THE ENTREPRENEURIAL WAY
CHRISTINE MICHAELIS
Founder of world’s first Digital Nomad Town and Vice president of European start up Association

KEYNOTE LECTURE 2 AND 3 (WEDNESDAY 11-1, IC HALL A)
FUTURE OF GAMES INDUSTRY
STEVEN HUCKLE
Creative England top 10 future leader and BAFTA nominated games industry art director

PRESENTATION WORKSHOP, BY TIM WEST (ACTOR, DIRECTOR)

KEYNOTE LECTURE 4
(THURSDAY, 10-11 IC HALL A)
FUTURE OF ROBOTIC AGRICULTURE
TOM DUCKETT,
FRSA, Director of Lincoln Center for Autonomous systems
CORE TEAM CHALLENGES

• We have come up with 4 CORE CHALLENGES (Robotics, Games, Computer Science and Electronics)

• No PREREQUISITE knowledge is assumed

• EVERY TEAM HAS BEEN ASSIGNED ONE CHALLENGE

• EVERY CHALLENGE HAS A MENTOR, ADDITIONAL SUPPORT IN TERMS OF STAFF/GLA, ACCESS TO EQUIPMENT YOU MIGHT NEED

• ALL CHALLENGES ARE EQUIVALENT IN TERMS OF THE BASIC SKILLS YOU WILL EVENTUALLY GATHER
Introduce you to the core challenges (just the problem statement- no lecture)

Provide some information related to “Labs, Team Mentors”

(This is important because we are a large group, challenges take place in various labs at different times)
CHALLENGE 1 - PLANE HACKER 2.0
MENTORS - ADRIAN CLARK, DAVID BEBBINGTON, MAYS AL-NADAY AND NICK ZAKHLENIUK

- Eastern approach to Stansted Airport runs through Colchester

- All modern day commercial aircrafts transmit information about themselves and their flight. The transmissions contain a digital packet.
CHALLENGE 1- PLANE HACKER 2.0
MENTORS - ADRIAN CLARK, DAVID BEBBINGTON, MAYS AL-NADAY AND NICK ZAKHLENIUK

• Eastern approach to Stansted Airport runs through Colchester

• All modern day commercial aircrafts transmit information about themselves and their flight. The transmissions contain a digital packet.

YOUR CHALLENGE -

To build a system using Raspberry Pi, a single-board computer and other hardware components like antenna etc, that receives and displays transmissions from aero planes passing over us

Most distant aircraft award....
CHALLENGE 1 - PLANE HACKER 2.0
MENTORS - ADRIAN CLARK, DAVID BEBBINGTON, MAYS AL-NADAY AND NICK ZAKHLENIUK

- Eastern approach to Stansted Airport runs through Colchester
- All modern day commercial aircrafts transmit information about themselves and their flight. The transmissions contain a digital packet.

Your Challenge - Our Challenge

To build a system using Raspberry Pi, a single-board computer and other hardware components like antenna etc, that receives and displays transmissions from aeroplanes passing over us

Most distant aircraft award...

Work with you to get this done!!!
- Every team will get their kits..
- Supervision (mentors/GLAS)
- User Manual (prepared by Adrian)
CHALLENGE 2 - CHAT BOT WARFARE

MENTORS - JOHN WOODS, JON CHAMBERLAIN, JAVIER ANDREU, WONG YANG, BART

• INSPIRED BY TURING TEST (ALAN TURING)
• CRITERIA OF INTELLIGENCE- ABILITY OF A COMPUTER PROGRAM TO IMPersonate A HUMAN IN A REAL-TIME CONVERSATION
CHALLENGE 2 - CHAT BOT WARFARE

MENTORS - JOHN WOODS, JON CHAMBERLAIN, JAVIER ANDREU, WONG YANG, BART

- Inspired by Turing Test (Alan Turing)
- Criteria of Intelligence - Ability of a computer program to impersonate a human in a real-time conversation

YOUR CHALLENGE -

Attempt the Turing Test!

Create such a conversation engine using Python

Warfare - Output of one team will act as input to the other - Hell will break lose!
CHALLENGE 2 - CHAT BOT WARFARE

MENTORS - JOHN WOODS, JON CHAMBERLAIN, JAVIER ANDREU, WONG YANG, BART

- INSPIRED BY TURING TEST (ALAN TURING)
- CRITERIA OF INTELLIGENCE- ABILITY OF A COMPUTER PROGRAM TO IMPERSONATE A HUMAN IN A REAL-TIME CONVERSATION

YOUR CHALLENGE - OUR CHALLENGE

ATTEMPT THE TURING TEST!

CREATE SUCH A CONVERSATION ENGINE USING PYTHON

WARFARE- OUTPUT OF ONE TEAM WILL ACT AS INPUT TO THE OTHER- HELL WILL BREAK LOSE!

WORK WITH YOU TO GET THIS DONE!!!

- STEM LABS EXCLUSIVELY RESERVED FOR THIS
- SUPERVISION (MENTORS/GLAS)
- USER MANUAL WITH TEMPLATES (PREPARED BY JOHN)
The 10 most influential video games of all time – in pictures

From university experiments to Japanese arcade treasures, here are the titles that have inspired generations of game developers

Keith Stuart
@keefstuart
Tue 16 May 2017 16.37 BST

Multi-User Dungeon (Mud), 1978

There were other adventure games before Mud (Colossal Cave: Adventure, Zork), and there were other networked multiplayer projects (including Empire by Peter Langston, running on a HP 2000 system in 1980), but the 1978 text-based, role-playing game created by Roy Trubshaw and Richard Bartle on the DEC PDP-10 mainframe at Essex University (its teletypes are pictured here), began a complex lineage that led directly to seminal massively multiplayer titles like Everquest and Ultima Online, as well as inspiring a generation of adventure and RPG game creators.

Photograph: Richard Bartle
CHALLENGE 3 - MYTHOLOGY BASED BOARD GAME

MENTORS - PROF. RICHARD BARTLE, SPYROS, JOSEPH WALTON-RIVERS, IAN DALY

- BOARD GAMES ARE FUN.
- THEY ARE IMPORTANT TOOLS THAT VIDEO GAME DESIGNERS USE TO PROTOTYPE/TEST THEIR IDEAS.
- ALL FUTURE GAME DESIGNERS MUST HAVE SOME EXPERIENCE.
- CREATIVITY, IMAGINATION, TEAMWORK.

YOUR CHALLENGE - OUR CHALLENGE

CREATE A NEW BOARD GAME (2-6 PLAYERS) ON THE THEME OF MYTHOLOGY (EVERY CULTURE HAS ONE...)

ITS UPTO YOUR IMAGINATION!!!

15 OR LOWER RATING PLZ....

WORK WITH YOU TO GET THIS DONE!!!

- WILL GIVE YOU LOTS OF INTERESTING STUFF (STICKERS, TREASURE COINS, DICE, PLASTIC PAWNS, GEM STONES, CUBES, BLANK PLAYING CARDS, FUNKY FOAM.......)
- PROF. BARTLE + 3 ACADEMIC STAFF WILL BE THERE, STEM EVENT SPACE
- A TUTORIAL DOCUMENT PREPARED BY PROF. BARTLE
CHALLENGE 4 - COBOTIC PRESENTATION ON FUTURE OF ROBOTICS

MENTORS - VISHUU MOHAN, DIMITRI, ALBA GARCIA, HAIDER RAZA, MARIANO

• YOU WILL HAVE ONE MORE TEAMMATE
CHALLENGE 4 - COBOTIC PRESENTATION ON FUTURE OF ROBOTICS

MENTORS - VISHUH MOHAN, DIMITRI, ALBA GARCIA, HAJDER RAZA, MARIANO

• YOU WILL HAVE ONE MORE TEAMMATE

PEPPER
**Challenge 4 - Cobotic Presentation on Future of Robotics**

**Mentors** - Vishuu Mohan, Dimitri, Alba Garcia, Haider Raza, Mariano

- You will have one more teammate (Pepper)
- In addition to Pepper, we will give access to some of our most expensive toys...

**UR3 - Essex Strawberry Picking Robot**

**Baxter**
CHALLENGE 4 - COBOTIC PRESENTATION ON FUTURE OF ROBOTICS

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• Roadmaps, white papers (EU, UK, USA)

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YOUR CHALLENGE - OUR CHALLENGE

HUMAN-ROBOT COLLABORATION

As a team, present along with the robot on the future of robotics

Work with you to get this done!!!
- Supervision (mentors/GLA's)
- How to make Pepper speak, hear, move, see, tablet
- User manual with instructions (prepared by me)
- Can be crazy, I don't know!!!
# THE TIMETABLE

- **LATEST VERSION AVAILABLE IN CHALLENGE WEEK MOODLE PAGE**

## WHO AND WHERE

<table>
<thead>
<tr>
<th>Time</th>
<th>STEM LAB</th>
<th>STEM Flexible</th>
<th>STEM Event</th>
<th>CES LAB 08</th>
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</thead>
<tbody>
<tr>
<td>12-13</td>
<td>Robotics A42-51</td>
<td>Robotics A52-60</td>
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<td>13-14</td>
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<td>14-15</td>
<td>Lunch</td>
<td>Keynote lecture 1 (Ivor Crewe Hall B) How to think the entrepreneurial way Christine Michaelis</td>
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<tr>
<td>16.30-18</td>
<td>Robotics A52-60</td>
<td>Robotics A42-51</td>
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<td>18-</td>
<td>Students can continue to work in the Labs, or other computing facilities 2 seconds/Day Video competition runs round the clock</td>
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</table>
FRIDAY- TEAM PRESENTATION AT THE LAKESIDE THEATRE....

• EVERY TEAM GIVES A 5 MINUTE PRESENTATION

• SUMMARIZE THE WORK DONE BY YOUR TEAM (RELATED TO YOUR CHALLENGE)

• PRESENTATIONS AND 10 SEC VIDEOS MUST BE UPLOADED IN FASER BY FRIDAY 10 AM

• TRY TO PRESENT CREATIVELY (VIDEOS, PHOTOS)

• HEAD OF SCHOOL, MENTORS, AND OTHER PEOPLE WILL BE ATTENDING

• BEST TEAM PROJECT FOR EACH OF THE CHALLENGE WILL WIN PRIZES

• BEST 10 SECOND VIDEO WILL WIN A PRIZE

IT WILL BE A FRIENDLY AND INFORMAL EVENT!!!
SOCIAL MEDIA

FOLLOW US TODAY ON THE UNIVERSITY OF ESSEX'S INSTAGRAM PAGE @UNIESSEX, WE ARE DOING A STORIES TAKEOVER!

TWITTER- #CSEEChallengeweek @Vishwanathan_M

FOLLOW US ON FACEBOOK - UNIVERSITY OF ESSEX COMPUTER SCIENCE AND ELECTRONIC ENGINEERING
ANY KIND OF HELP

• YOU NEED MORE ASSISTANCE TO DO YOUR CHALLENGE, HAVE QUESTIONS (EMAIL THE MENTORS, THEIR CONTACT DETAILS WILL BE THERE IN THE USER MANUAL THAT WILL BE UP IN MOODLE)

• DIFFICULTY IN UNDERSTANDING THE TIMETABLE (FIGURE OUT WHICH LAB YOU SHOULD BE GOING, WHERE IS THAT LAB)

  - GO TO THE SCHOOL OFFICE

  - SCHOOL OFFICE WILL ALSO BE ABLE TO ANSWER MANY GENERAL QUESTIONS
ANY QUESTIONS, HELP

HAVE FUN!!

SEIZE THE MOMENT!!

IMPOSSIBLE IS NOTHING!

VISHUU MOHAN
Office- 1NW.3.21

email- vm16090@essex.ac.uk
SUMMARY

TODAY-
12.10 - GROUP PHOTO, TAKING OVER SQUARE 1
12.30-1.30 - TEAM MEMBERS MEET
1.30-4 SCAVENGER HUNT
4- TUTORIALS GO LIVE IN CHALLENGE WEEK MOODLE

TUESDAY - THURSDAY
• KEYNOTE EVENTS IN THE IC LECTURE HALL
• TEAMS WORK ON CORE CHALLENGES (IN VARIOUS LABS)

FRIDAY TEAM PRESENTATIONS IN STEM EVENT SPACE

IN 3 DAYS---→
Thank You + ??????