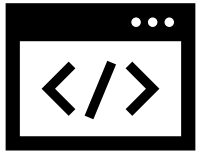
Imperial College London



BIOE50010 – Programming 2

Computer Lab 10, Assignment 2

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December 11, 2023

Assignment 2

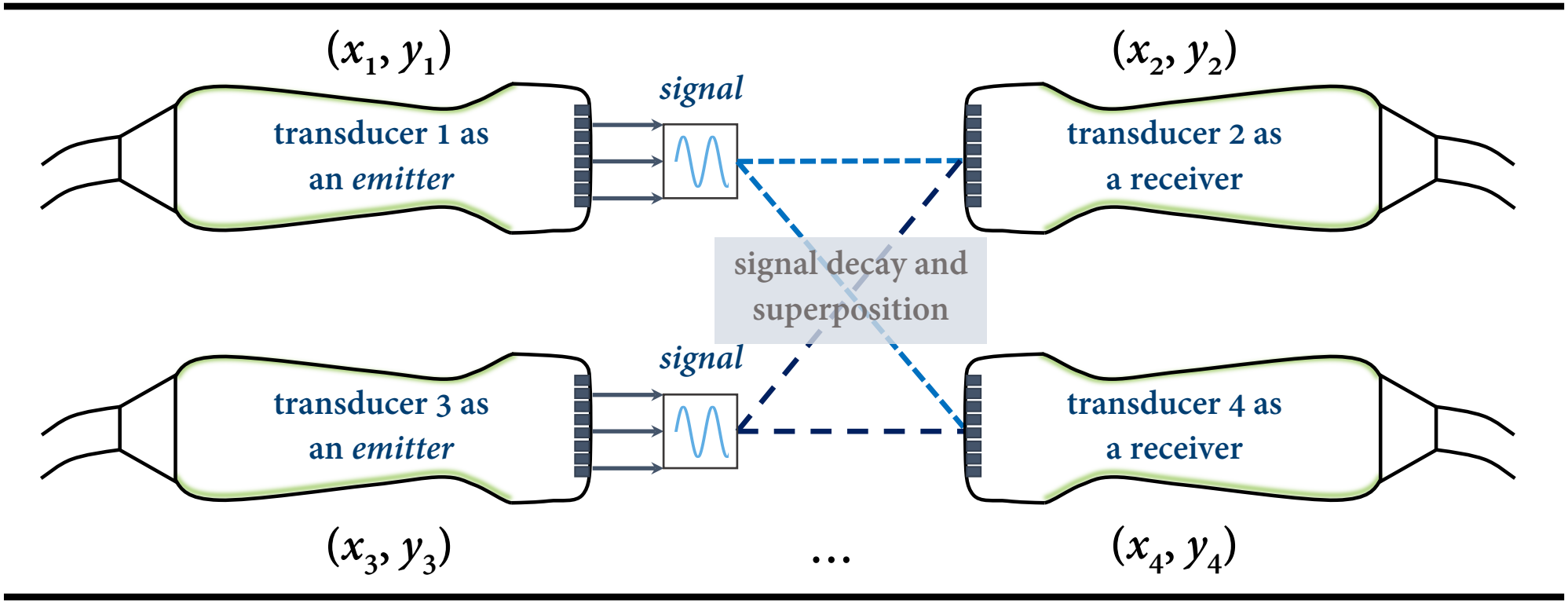
Questions should be logged on the ed discussion

Deadline for submission: 3 pm on 15 December

End of discussion service time: 9 am on 15 December

- Sound simulator
- We test…
  - *your understanding to the rules of sound propagation and OOP*
  - *your capability to bridge your understanding and implementation*
  - *you follow the best coding practice*
- ***"Working code is the best code."***

Assignment 2 – Sound Simulator



time = distance / velocity

Assignment 2 – What Else?

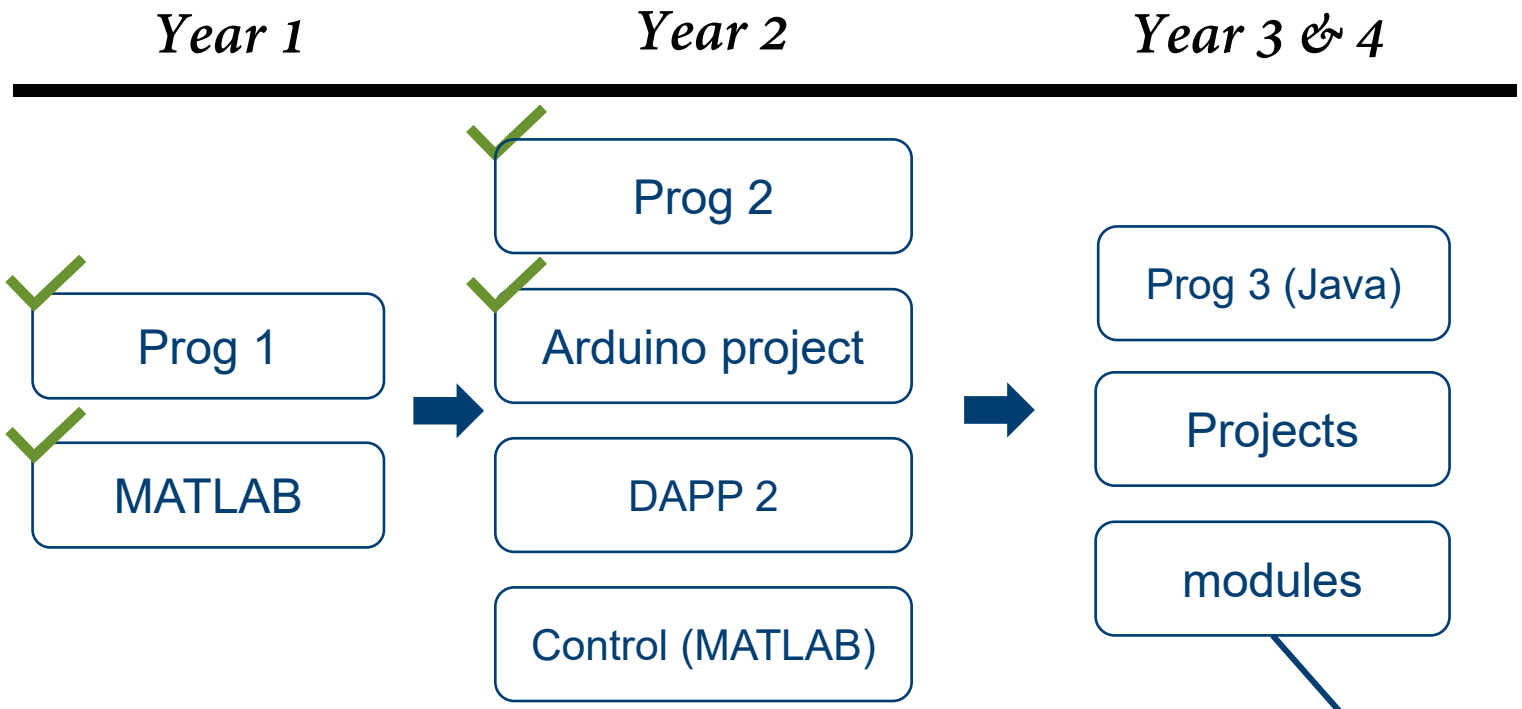
- Read the ***assignment descriptor*** carefully – make sure you understand the relations here.
- Scrutinize the ***driver script*** carefully – it is not that straightforward.
- A couple of coursework settings are currently under the investigation (thank you for raising them to us *via* Ed!). **Keep an eye on the update (11/12/2023)**

$$q(\mathbf{r},t)=\frac{1}{N}\sum_{i=1}^{N}|\mathbf{r}_i-\mathbf{r}|p\left(\mathbf{r}_i,t+\frac{|\mathbf{r}_i-\mathbf{r}|}{c}\right)$$

My Practical Suggestions

1. Code as per instruction – double check the type of your attributes and function argument/return.
2. Do not introduce extra attributes/methods to the class; do not use inheritance unless explicitly instructed.
3. Develop an intuition to the data you are working on – *e.g.*, 3-dimensional list, what's the physical meaning of the 1st, 2nd, and 3rd free index? (x, y, and time)
4. Always enforce the rules applied to the location where *seems* to be less important – *e.g.*, the signal amplitude should be 0 outside the region of sinusoid, make sure it is 0.

Debriefing



- Modelling in Biology
- Digital Signal Processing
- Comp. Neuroscience
- Probability and Statistics
- Image Processing
- Animal Locomotion

etc.

Debriefing

- Thank you!
- Still, your Ed discussion service will be continuing until **9 am 15th December (Friday)**.
- **GTA of the Year** nomination (in summer). Will you be considering us?
- Merry Christmas! Good break and smooth exam prep!