

Developing programming problem-solving skills using individualised screencasts

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The project

- TM111 tutors to provide short video screencasts containing personalised TMA feedback
- Tailored to individual misconceptions, mistakes and areas for improvement
- Audio and visual insight into how an experienced programmer solves a problem

Aims

- Do students understand concepts more deeply?
- Are they more skilled at programming problem-solving?
- What kind of content is most beneficial?
- How time-consuming for tutors?

18J

- Five tutors give screencast feedback
- Tutors and students surveyed and interviewed

19J

- Disseminate recommendations to all 19J tutors, get volunteers for 19J
- Tutors and students surveyed and interviewed

Future potential for screencast feedback

- Continue use on TM111
- Develop use in other programming modules e.g. TM112
- Develop use in other problem-solving disciplines e.g. maths

A program is required to decide the appropriate category for the entrant; display the entrant's name in a list for that category, and output the corresponding entry price.

Assume that the age will be entered as a whole number.

Input age
Input name

Decide the appropriate category for the entrant using their age and the category limits

If the entrant is a junior then
Record the entrant

Display Record the entrant's name in a list for their category
Output the corresponding entry price

```
when clicked
  set FULL_TICKET_PRICE to 1
  set CONCESSIONARY_TICKET_PRICE to 0.5
  key Press your spacebar to calculate total ticket price for 2 secs
  when space key pressed
    ask How many full price tickets and wait
    set full_price_number to answer
    ask How many concessionary tickets and wait
    set concessionary_price_number to answer
    set full_ticket_price to full_price_number * FULL_TICKET_PRICE
    set concessionary_ticket_price to concessionary_price_number * CONCESSIONARY_TICKET_PRICE
    set total_price to full_ticket_price + concessionary_ticket_price
    key join The total price is total_price for 2 secs
```