



Flinders
UNIVERSITY

inspiring achievement

Online campus navigation tool for students with mobility difficulties



FLINDERS UNIVERSITY

Brett Wilkinson (Lecturer in IT) & Paula Williams (Disability Advisor)

Rationale

- Legal requirements
- Flinders campus
- Flinders University Disability Action Plan
- 2007 - influx of students with significant mobility limitations
- 2008 - Access audit of campus

Legal Requirements

- Disability Discrimination Act 1992
Section 23 - Access to Premises

It is unlawful for a person to discriminate against another person on the ground of the other person's disability:

(c) in relation to the provision of means of access to such premises;

Flinders Campus

- Hilly site!
- Overall slope 12_{deg}
- In places 25-30_{deg}



Flinders Uni Disability Action Plan

Objective 8:

To create a physical environment that can reasonably accommodate people with disabilities.

- Every area of the University should be open and accessible to people with disabilities in the same way it is open and accessible to people without disabilities.

How do new students find the access routes?

2007 - 4 students using wheelchairs, and 3 with significant vision impairment

- O-week tours (quick routes only)
- Security staff (often too busy)
- Disability Advisors (far too busy! but we make the time!)

Access Audit 2008



50 recommendations:

- R25: Delineate access paths including connecting lifts and corridors
- R31: Use Web to assist students learn about the access path including virtual tours of internal and external paths

Discussion

- Access issues at your institutions?
- How do you orientate new students with restricted mobility?
- What impact does this have on students' experience of first year?



Functional

- Campus relevant
- Node c
 - Access inters secur
- Nodes building

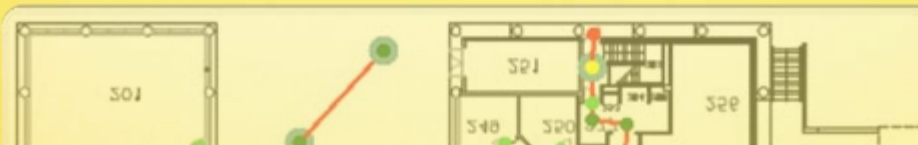
IST Building, Level 2



with

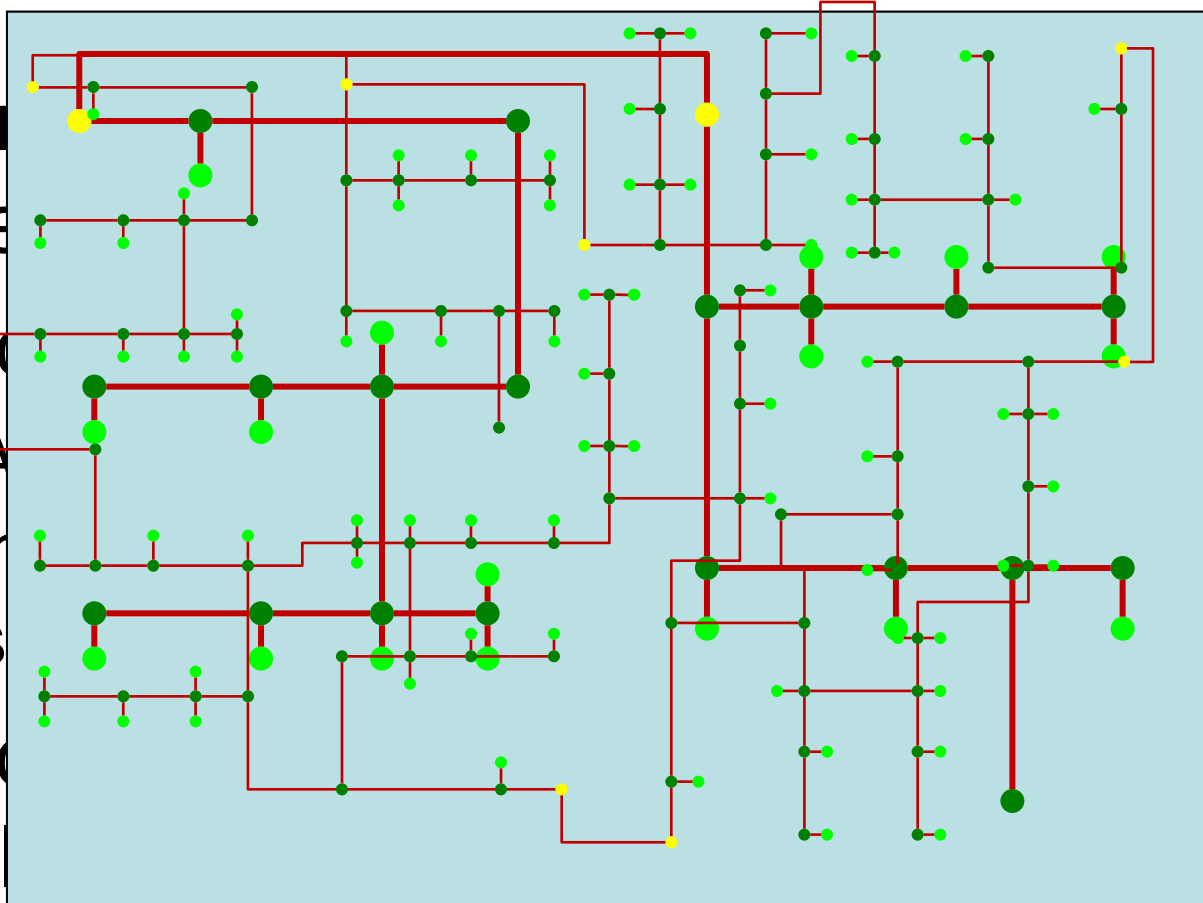
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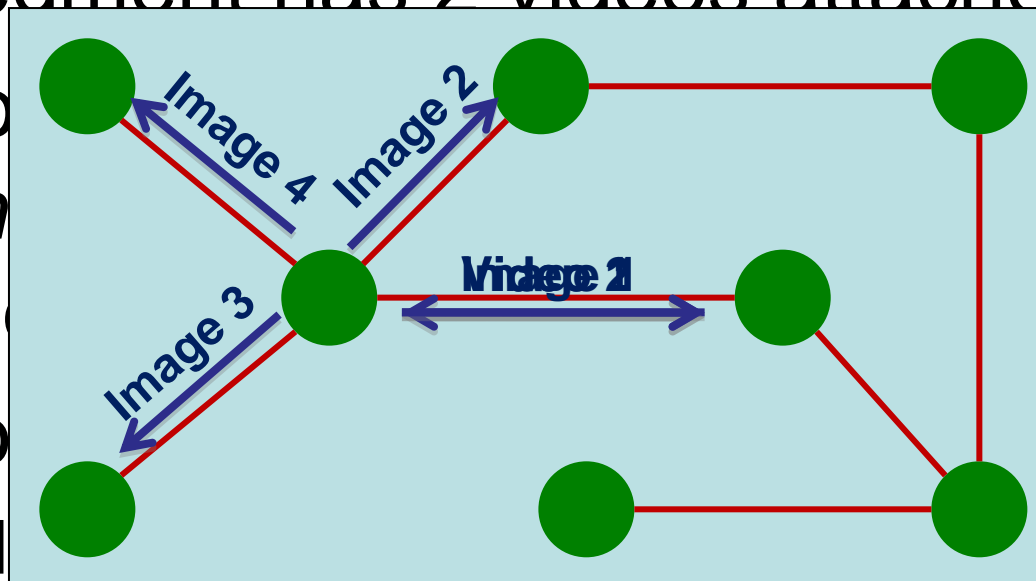
- Using map scale a cost is allocated to each segment (metres)
- The cost of a segment is multiplied by its difficulty if the student has limited mobility
 - Clear → 1;
 - Loose Surface → 5;
 - Slope – Gentle → 10;
 - Slope – Steep → 25;
 - Stairs → 100;
 - Step/Gutter → 50;

Functionality

- This overall cost is applied to segments
- This means that for a student with limited mobility 10 metres of stairs is equivalent to 1000 metres of clear corridor
- Using Dijkstra's shortest path algorithm a route is calculated

Functionality

- Each segment has 2 videos attached to it
- Each node has n images attached to it, where n is the number of segments connected to it
- The show identifies:
 - the videos required for the route and add them to an XML file for playback
 - the images required for the route and add them to the web page



Demonstration



Accessibility Wayfinding Project

Wayfinding Around Flinders

Using the map or drop down menus below select the building or location that you are starting from. If you are inside a building then select the appropriate floor from the menu that appears.

Starting Location:



Discussion

- How useful would this application be in your environment?
- What other strategies have been used?
- What would work at your institution?

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