

Creating Networks in Edgy Session

Introduction to Edgy

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What is Edgy?

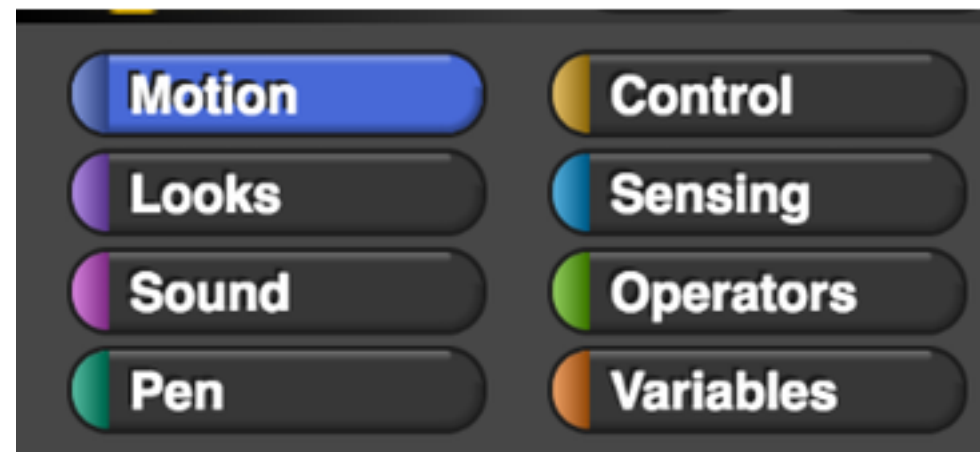
- A modification for *Snap!*
- Create and manipulate *Graphs* with code blocks
- Piloted in VCE Algorithmics (this subject includes *Graph Theory*)
- Also used in an Undergraduate *Algorithms* course at *Monash*

Edgy Websites

- Snap Apps: Edgy website
- Github: Edgy website
- *Programming with Edgy* materials on Alexandria Repository

Edgy vs Snap!

Snap!



Edgy



- One *Graph* - instead of multiple *Sprites*
- No *Motion* or *Pen* blocks in *Edgy*

Edgy Blocks

— **Networks**

— **Nodes**

— **Edges**

— **External**

— **Collections**

Snap! Cloud Account

- You can register for a *Cloud Account* to save your *Snap!* projects
- Unfortunately *Edgy* does not allow this
- Can also save projects to:
 - an *XML file* through *File > Export Project*
 - the *Web Browser* through *File > Save*
- We recommend exporting the XML files and keeping them on a USB and/or emailing them to yourself at the end of the day

Edgy Examples

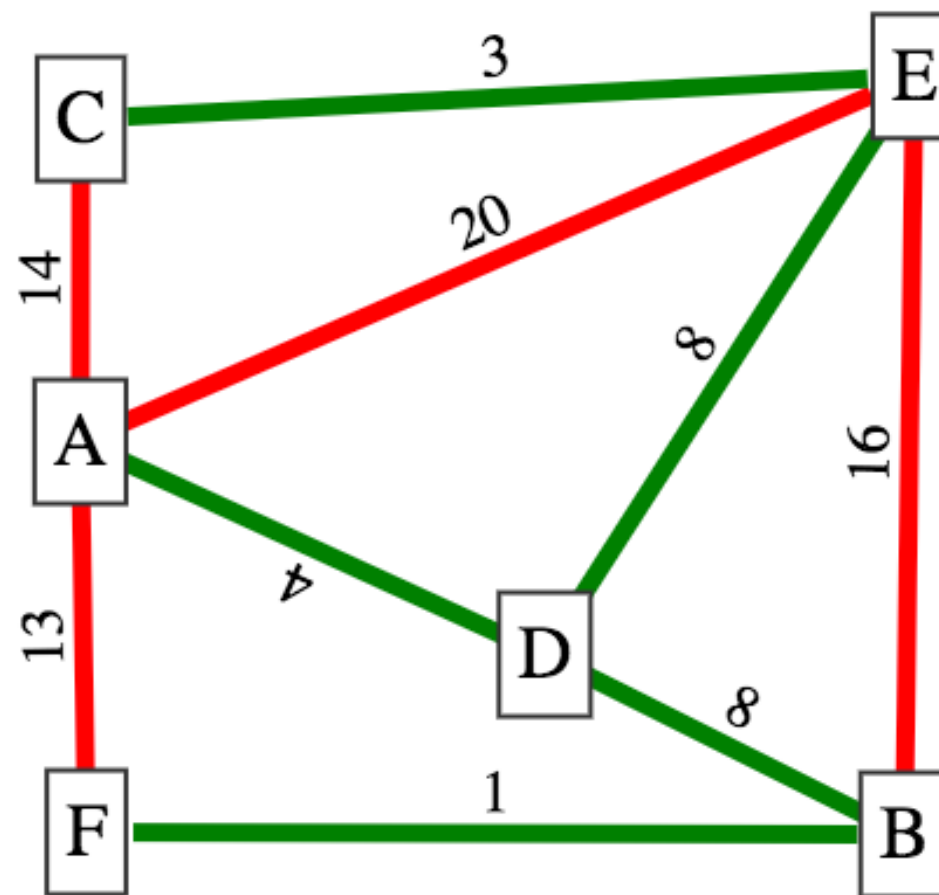
- On the Snap Apps: Edgy website there are some example *programs* to download
- Can download these as *XML* files
- Includes *Muddy City MST Activity* from Computer Science Unplugged in *Edgy*
- *File > Import...*

Random, Cyclic & Connected Graphs

- In this activity, you will create a *program* that:
 - Creates *random Graphs* for a number of *nodes* and *probability*
 - Checks whether *Sub-Graphs* with coloured *edges* are *connected*
 - Checks whether *Sub-Graphs* with coloured *edges* are *cyclic*
- These *algorithms* will be used in the session for finding MSTs as well

Random, Cyclic & Connected Graphs

- Is G_R *connected* and/or *cyclic*?
- Is G_G *connected* and/or *cyclic*?



Summary

- In this presentation I have:
 - Introduced you to *Edgy*
 - Explained some of the main differences between *Snap!* and *Edgy*
 - Showed you a few different websites for using and learning *Edgy*
 - Explained the main parts of the *Edgy* interface
- **Any questions?**