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Intro to myself – Author of "Learn Electronics with Raspberry Pi"

Website www.penguintutor.com

Going to talk about designing for 3D printing.

Why 3D designs in Code Club

Look at Blender – Code Club resources

Other tools - eg. TinkerCAD

It doesn't have to be a snowman?



Some other examples.

Create virtually anything you want can make them into a physical object or use them in a computer (eg. game sprites).

3D designs

- Coding meets Art and Design
- Create sprites for computer games
- Multimedia
- Design for the future



Useful computing skill

Coding and art goes hand-in-hand, both are creative mediums.

Creating images and 3D models is another way of engaging the creative side through computing.

It is a form of multi-media. In the case of Blender it's possible to create animations in Blender.



Quick demonstration

Blender is a tool for creating objects using simple shapes.

Good for creative free form editing.

+ Very powerful – fully functional – professional tool

- Difficult to learn initially, but worthwhile

+ CodeClub materials specifically written for Blender which make learning it fairly painless.



More of a CAD tool compared to Blender. Can place items with good degree of accuracy.

It is very easy to use

Includes code blocks

Has limitations in use (size limited to that of a typical 3D printer) – vs professional tools

Not so many materials / guides

Suggest if you have a Code Club member that wants to do something more practical than creative.

Also includes code blocks and circuits. Has limitations (200 objects) and cannot be edited

Summary

- 3D design adds new tool
 - Fun
 - Useful
 - Creative
- Code Club Blender projects
- Other tools available (eg. TinkerCAD)



More information – 3D design

- Code Club blog
 - https://tinyurl.com/ya68crtv
- This presentation and more information
 - www.penguintutor.com/3dprint
- Follow me @penguintutor