



## Young persons' accelerator programme

Programme length: **4 weeks**

Weekly delivery: **5 hours**

Weekly coursework: **5 hours**

Group size: **8**

Delegate age range: **16-24**

Delivery method: **Zoom**

Over the course of 4 weeks, this programme of work will train each group of 8 young people how to design and develop physical products while also teaching them about creating brands that fit the markets they're selling to.

By the end of programme the delegates will have:

- Created their own website, logo and branding.
- Registered on project management tools and used them to manage their work.
- Learned about product development and design.
- Learned to use 2D and 3D design software.
- Designed products to a consumer grade level.
- Learned about e-commerce and ways to get started selling their creations.
- Learned about product photography and videography.
- Learned how electronics products are made and how to start designing them.
- Learned how to edit videos.
- Learned about crowdfunding and how to create a Kickstarter campaign.

The programme is structured to:

- First set up the delegates for managing and organising their work.
- Moving on to give the delegates some foundation skills in design and prototyping to get ideas following and give them a context.
- Then get them thinking about product development and design in relation to their identified prospective customers.
- Then show them how to market and deliver their products to those prospective customers.

This programme has been designed to be practical and actionable, requiring the delegates to implement what they learn to create viable products that they will then market, sell and ship to their customers.

Delegate requirements:

- Computer with internet and a mouse.
- Good basic computer skills.
- A desire to learn and work hard.

- Week 1 - Workshop 1 - Project management workshop

## PROJECT MANAGEMENT TOOLS



In order for any product to succeed a good organisation of the workload is required. Here, the delegate will learn how to use free online tools to ensure they keep on track for completing their projects on time.

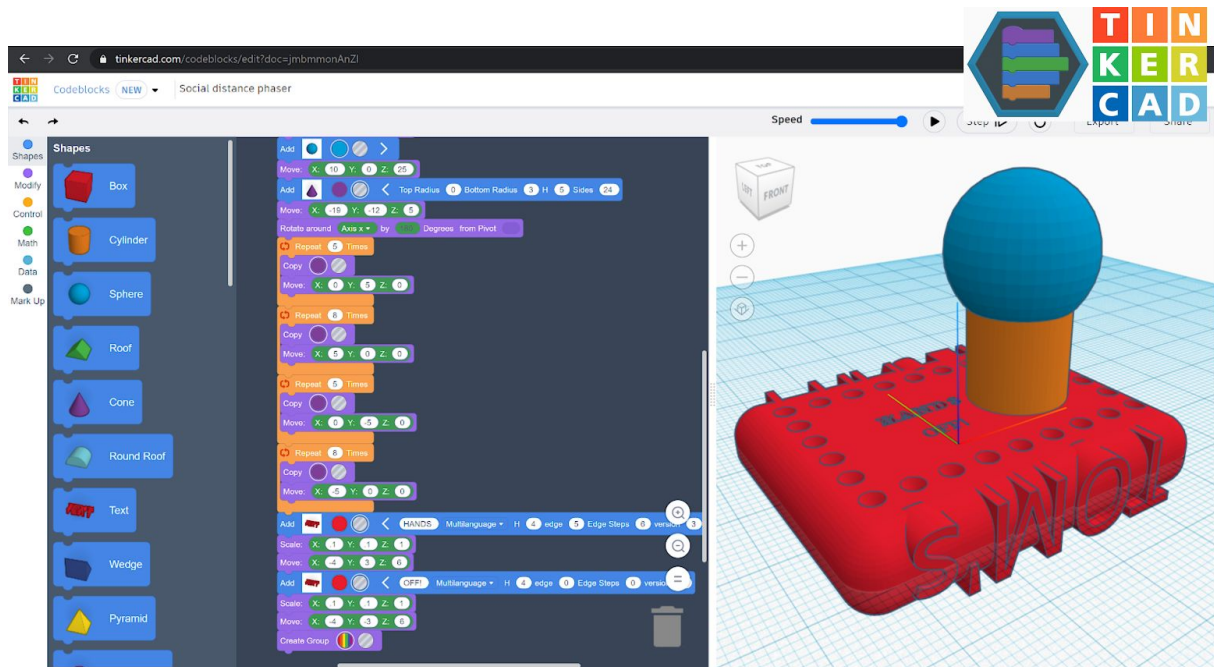
## Week 1 - Workshop 2 - Intro to 2D design

### PROJECT - DONUT



The delegates will learn to use a 2D vector graphics program called Inkscape, such a program will create vectors for the shapes of a product that can be manufactured using a CNC or laser cutter.

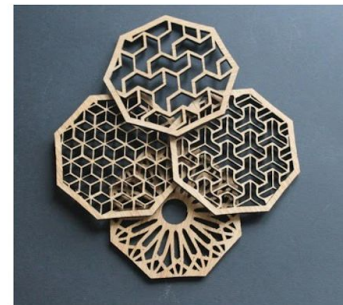
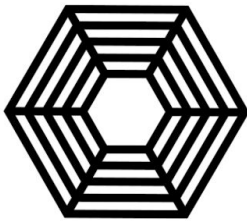
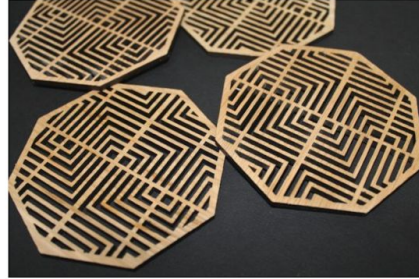
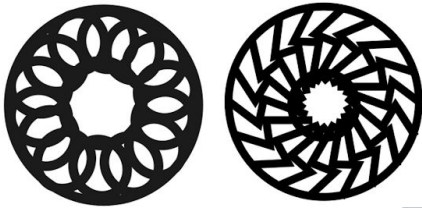
## Week 1- Workshop 3- Intro to 3D modeling



The delegates will learn how to use a 3D modeling software called Tinkercad. This program runs in a web browser, known for its simplicity and ease of use. It is the ideal tool for use with a CNC, laser engravers, and 3D printers.

## Week 2 - Workshop 4 - Intro to laser cutting

### PROJECT - COASTERS



The delegates will learn how a laser cutter machine works as well as how to manufacture a prototype that can be used for further development and improvement of their idea. The main idea is to expose the delegates to new technologies that can be used for rapid prototyping.

## Week 2 - Workshop 5 - Vinyl Cutting( how to use a vinyl machine for marketing )

### ASSEMBLING THE LOGO

Use transfer tape to help you maintain all the small pieces together in the right place.

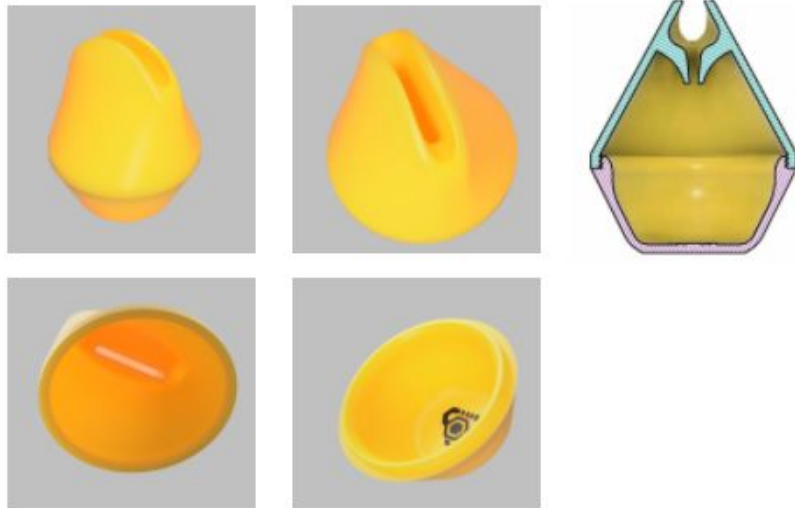
Peel the transfer tape and display your logo proudly :)



The delegates will have the opportunity to create their own logo for marketing purposes with some guidance from our Product designer. Their logo will be cut using a vinyl cutter. This project will lead them to experiment with different designs for a possible online business or product they want to create.

## Week 2 - Workshop 6 - Product development

3D MODEL



The delegates will learn how to develop an idea from start to finish by applying the design thinking process. This process will allow the individual to come up with different ideas to test and see if their idea is adequate as a possible solution to a specific problem.

## Week 2 - Workshop 7 - Intro to brand and logo design

### CHECKLIST FOR MAKING A LOGO

1. Understand why you need a logo
2. Define your brand identity
3. Find inspiration for your design
4. Check out the competition
5. Choose your design style
6. Find the right type of logo
7. Pay attention to color
8. Pick the right typography
9. Communicate with your designer
10. Evaluate your logo options
11. What not to do when designing a logo
12. Integrate your logo design into your brand

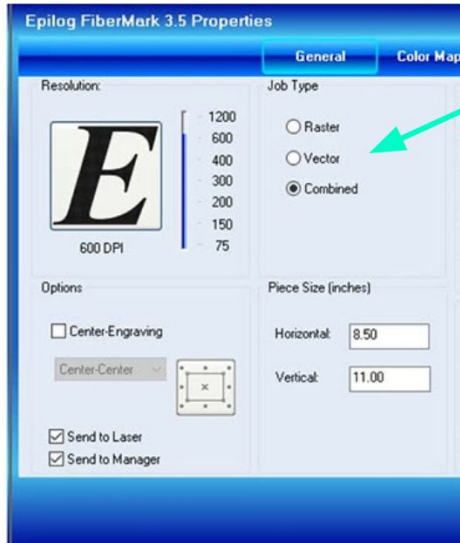


The delegates will be provided with information about making a logo using Inkscape. Furthermore, we will look at what makes a good logo as well as why it is important for a business or a product.



## Week 3 - Workshop 8 - Laser cut products

# HOW TO USE THE EPILOG SOFTWARE?



### Vector:

In **vector engraving**, the **axles** **move simultaneously**, and more slowly than in raster engraving. The process itself is the same as in laser cutting; **the difference** is the selected **power setting**.

The delegates will be given a live demonstration over zoom of what to do and what not to do while manufacturing products with a laser cutter machine. Our product designer will demonstrate the safety measures required when operating the machine.

## Week 3 - Workshop 9 - Product Photography

### CAMERA ANGLES

#### Low Angle:

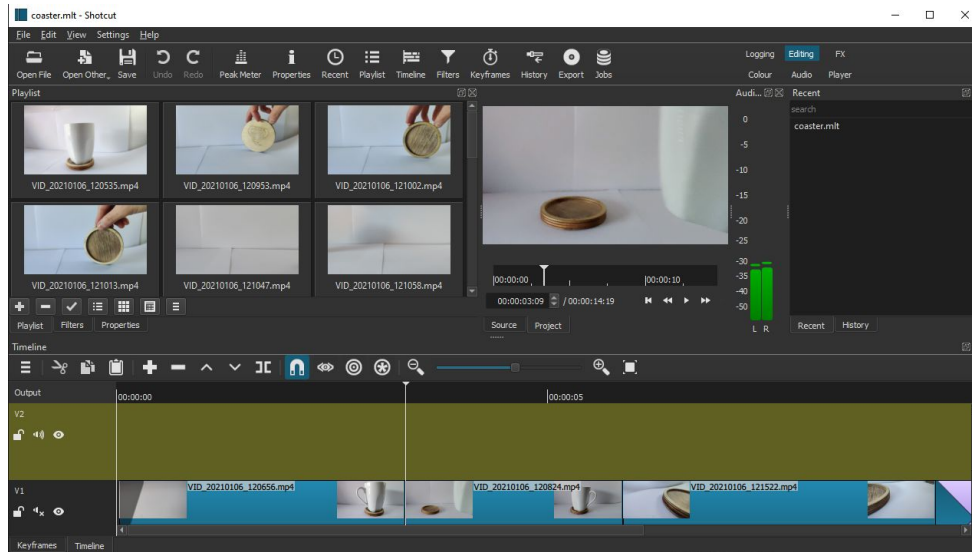
It's typically **taken straight** on from the product, **but also has the angle of the floor** or flat surface and is typically shot with the **camera** pointing **slightly upward**.



The delegates will be given an introduction to product photography covering a range of topics such as camera angles, lighting, editing, camera selection, etc.

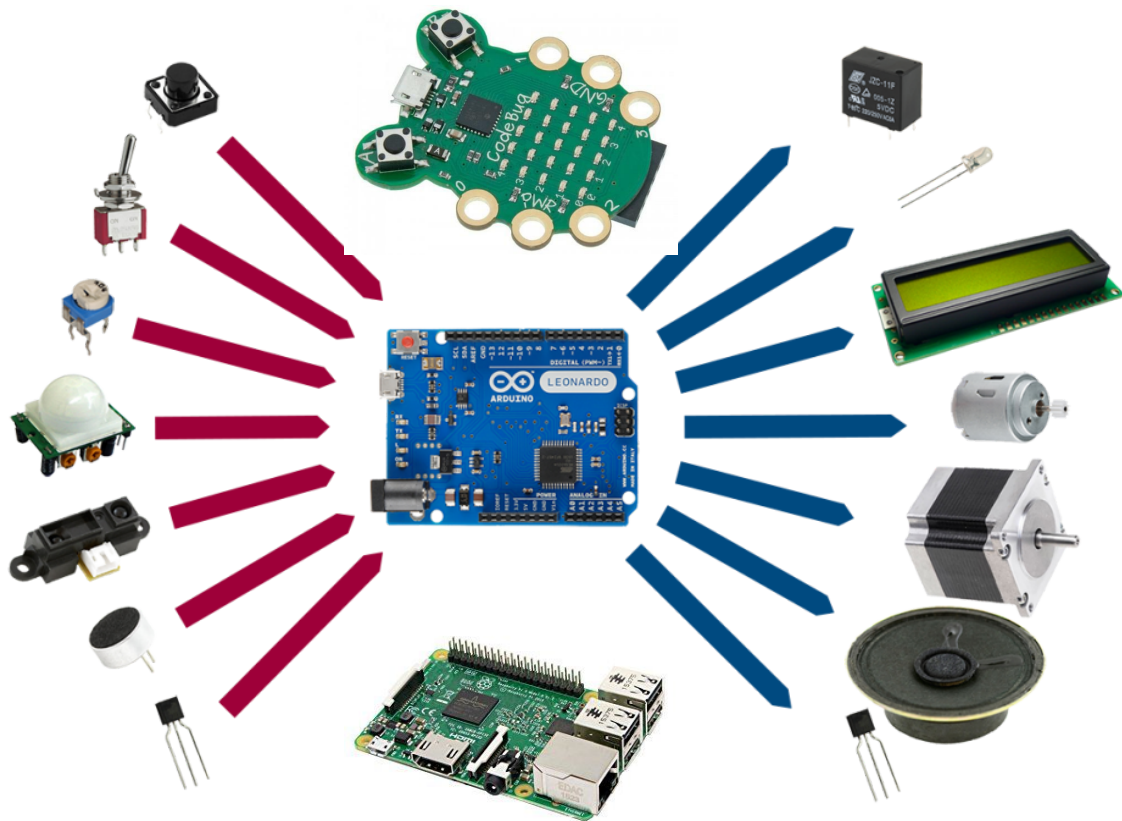
This is a great opportunity for the delegates to expand their knowledge about presenting work for future opportunities that may require them to have a portfolio to showcase their skills.

## Week 3 - Workshop 10 - Product Videography



The delegates will learn to film and edit a small video about product advertising that can be later used for crowdfunding campaigns. This workshop will cover the practical as well as the theory required for making such videos.

## Week 4 - Workshop 11 - Electronics



In this session we will show the delegates how electronics products are designed, prototyped and manufactured. The delegates will then get the opportunity to get hands-on with designing virtual circuits and programming them.

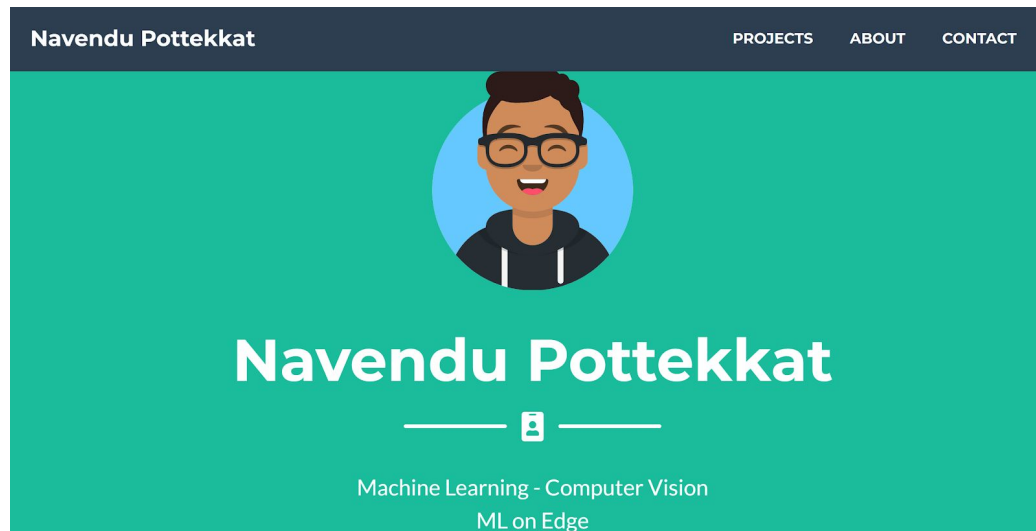
## Week 4 - Workshop 12 - Crowdfunding & kickstarter

### CROWDFUNDING PLATFORMS



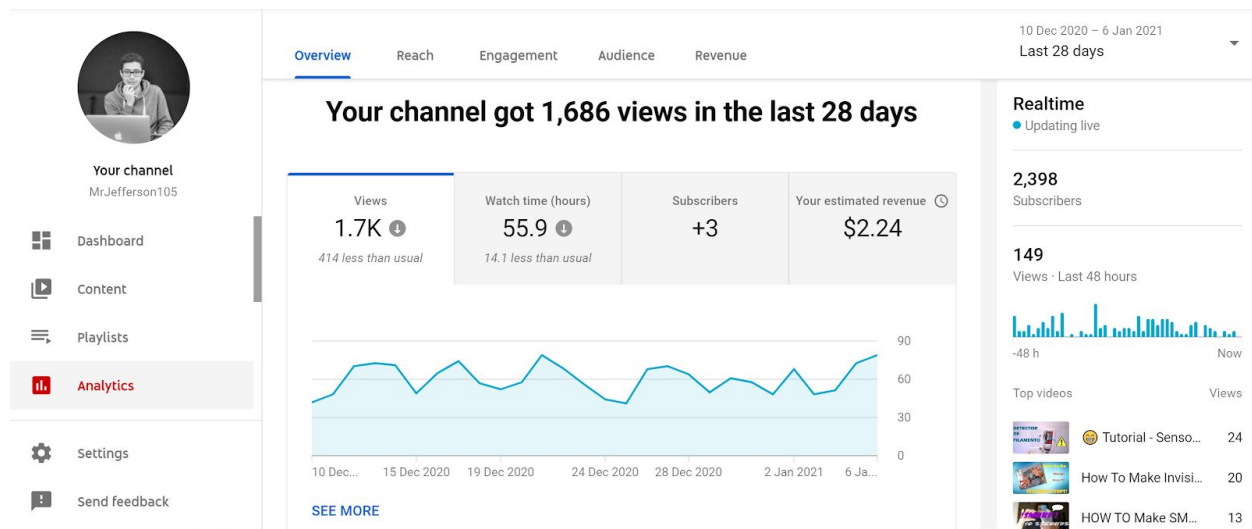
The delegates will learn how to find alternative ways to fund their projects. Crowdfunding is a popular way to do so, the main idea is to reach as many people as possible via the internet. The delegate will be given the skill required to complete a campaign and see if the rest of the world finds their idea interesting to back them up on their development.

## Week 4 - Workshop 13 - Website development



The delegates will be shown how to make a static webpage with GitHub pages. This will allow them to have a repository for their future projects. While making the website they will be introduced to some coding as it is required for the back end of the website to work.

## Week 4 - Workshop 14 - YouTube



The delegates will be shown how to make a Youtube channel. Besides managing the video content using the analytics provided by Google. This is a powerful way to show the world an idea. After their channels have gathered more than 1K subscribers, they will be allowed to monetize any video, thereby generating a small revenue from the ads shown.