

Avant-Garde

Handsfree Canvas

COMP0016: Systems Engineering

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Partner Organisation: Microsoft

let's create >>

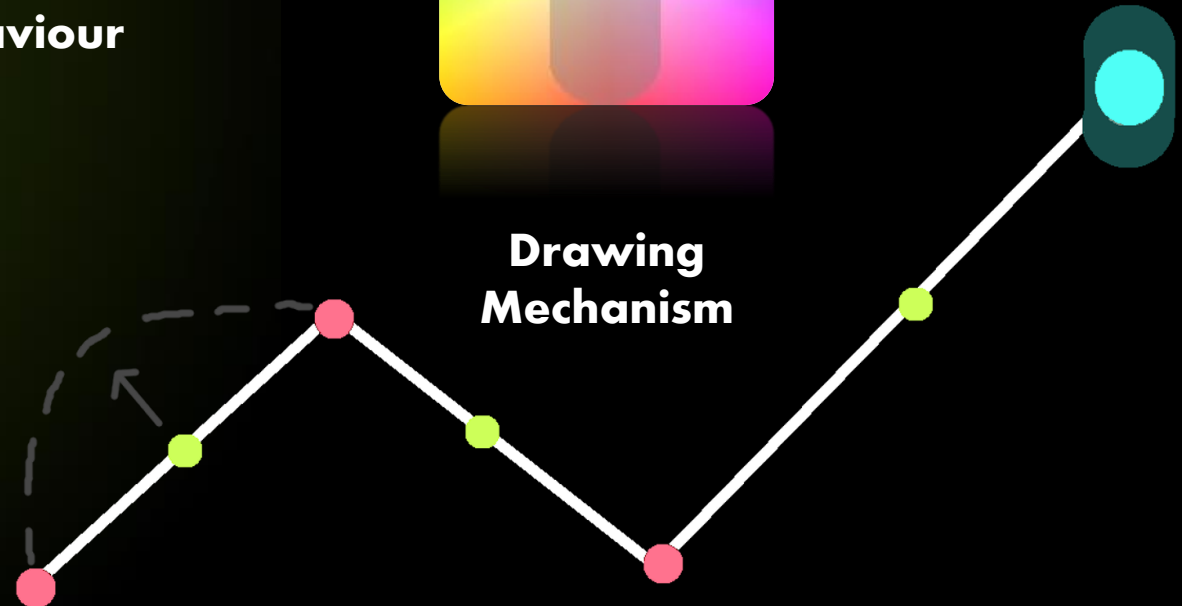
Research and Requirements

- **Goals:**
 - Softening the hindrances of disability
 - Inspiring the artistic spirit
- **An HCI challenge:**
 - Understanding the eye's instinctive behaviour
 - Creating smooth, deliberate strokes
- **Universal Windows Platform application:**
 - Developed with C# and XAML
 - Integrating Tobii Eye-Tracker

Joystick Mechanism

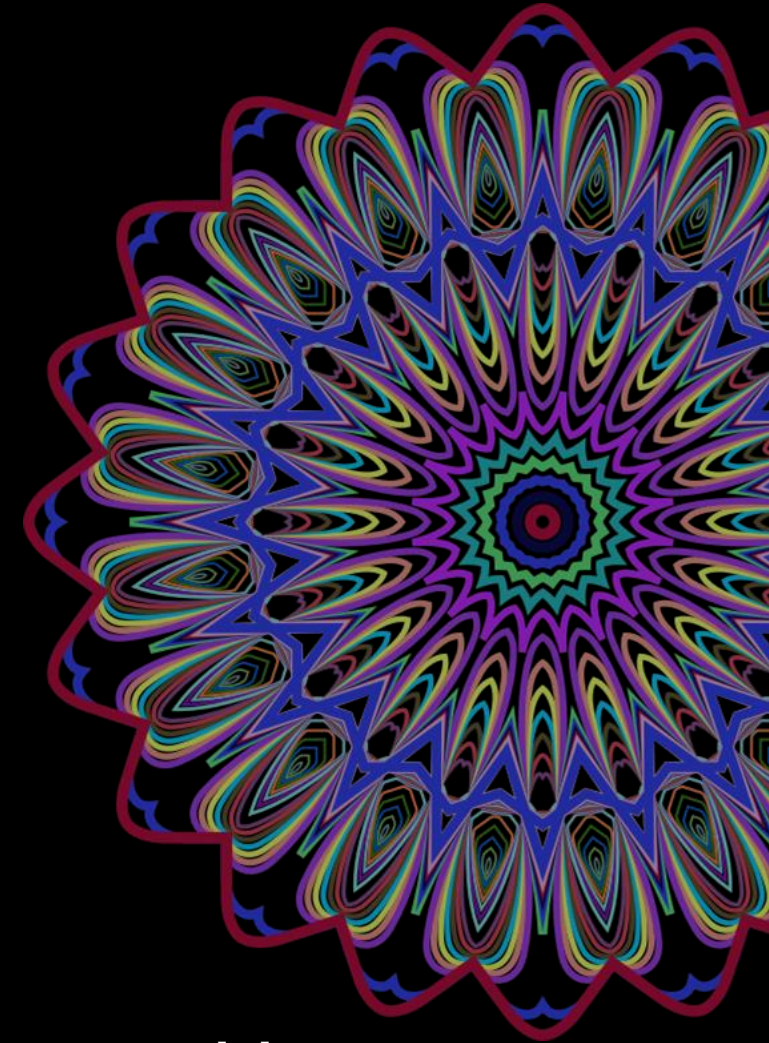


Drawing Mechanism



Future Plan

- **Libre: a classic paint application with a handsfree UI**
 - **Free expression and creativity**
- **Fleur: create beautiful mandalas - abstract, geometric design**
 - **Visual exploration and pleasure**
- **Intended features:**
 - **Multiple mandala algorithms**
 - **Adding and manipulating shapes in canvas**
 - **Exporting finished designs**



Mandala