

Introduction to Programming II

Project Log

Project title:	Music App Visualiser – Circular Wave Pattern with Fireworks
Topic:	Week 14
What progress have you made this topic?	
<p>In the previous phase, I successfully implemented a circular wave pattern consisting of three pulsating rings that synchronised with the music's waveform. To improve this extension, I introduced fireworks beat detection inspired by Week 13's lecture.</p> <p>By using beat detection to create a rhythmic music visualisation, this improvement to the circular wave pattern gave the extension a livelier appearance. I incorporated a dynamic colour scheme to the fireworks using the HSB (Hue, Saturation, Brightness) colour mode, where the colour was determined based on the frame count. This feature adds a vibrant and contrasting aspect to the representation, making the fireworks stand out against the black background. As the fireworks dissipated into the background, they mimicked the mesmerising appearance of real fireworks.</p> <p>Additionally, extending the HSB colour change technique to the circular wave pattern itself further enhanced its visual appeal. This addition contributes to the overall aesthetics of the extension making it more captivating.</p> <p>Overall, these improvements have elevated the circular wave pattern extension by adding dynamic beat-synced fireworks and an enticing colour scheme. These improvements and progress have made this extension more engaging and visually mesmerising for the audience. I am proud to have made these working improvements by implementing ideas covered in the lecture and discussed by my tutor.</p>	
What problems have you faced and were you able to solve them?	
<p>I did not face any problems regarding this extension as I followed the coursera tutorial closely and was able to implement the fireworks beat and HSB dynamic colour scheme without a hassle.</p>	
What are you planning to do over the next few weeks?	
<p>Week 15-16: I am planning on continuing with my schedule but also implement a 3 dimensional effect to the Ridge Plots extension so instead of it being plain 2 dimensional lines, I would like for it to have a sense of depth. I would also be recording my changes on report 2.</p> <p>Week 17-18: I would like to allow users to change the music (slow/medium/fast). The pace and type of music greatly impacts behaviours of the extensions. This would enable them to observe the changes reflected on the extensions. I would also be recording my changes on report 3.</p> <p>Week 19-20: Improve the GUI to be more user-friendly and visually pleasing. I would also be recording my changes on report 4.</p> <p>Week 21: I plan on debugging my code, checking through the reports and finalising my submission.</p>	

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

Yes, I am on target to successfully complete my project and would like to challenge myself to research more on what I can implement into the project outside of the videos covered on coursera.