**Multimedia Systems Practical Lab 1 Report**

**Introduction**

This report summarizes how we developed multimedia content using various software tools and applied design principles to create an interactive digital campaign platform.

**Task 1: Multimedia Hardware and Software**

We researched and compiled a comprehensive list of multimedia hardware including Sony Alpha a7 IV cameras, Shure SM7B microphones, Wacom Cintiq Pro tablets, and LG UltraFine displays. For software, we compared open-source options like GIMP, Inkscape, and Blender with proprietary solutions such as Adobe Creative Suite and Autodesk products, evaluating their suitability for JKUAT's multimedia lab.

**Task 2: 2025 JKUSA Student Election**

We designed and implemented a responsive website using WordPrewhich we had coded using HTML, CSS and Javascript to showcase candidate manifestos for the JKUSA elections. We created campaign posters at 300 DPI for print and 72 DPI versions for web display, demonstrating the resolution differences. We also produced an animated GIF banner (that was <100KB) for the site navigation, optimizing it for quick loading.

**Task 3: Graphic Creation**

We developed a cross-platform advertisement for our personal items using DaVinci resolve. The design incorporated original photography, animated transitions, and audio narration targeting student buyers. We applied design principles to create versions suitable for website embedding, television broadcast, and print media while maintaining brand consistency.

**Task 4: Clickable Links to YouTube Videos**

We made animation videos of the campaign that we still edited using DaVinci resolve, uploaded them to YouTube, and embedded them on the website with HTML5. We implemented a filtering system allowing users to select specific campaign topics, and added complete transcripts to ensure accessibility and SEO optimization.

**Conclusion**

Through this hands-on practical, we gained valuable experience with current multimedia technologies. The project improved our skills in web development, digital content creation, and more abilities essential for modern multimedia communications.