Bariq Maulana

001202100119

TASK 1: Multimedia Application Development

Task 1

Find and explain briefly about the multimedia tools for:

1. Digital audio
2. Graphics and image editing
3. Video editing
4. Animation
5. Multimedia authoring

*at least 2 tools for each

Answer:

1. **Digital audio:**
   - **Digital Audio Workstation** = DAW is a music and audio software that allows users to record, mix, and edit their audio on their personal computer. It works by converting analog audio which comes from external audio interface into a digital sequence that can be processed by computer. There are 5 main functions in DAW: record and edit video, play virtual instruments, experiment with audio effects, mix and master audio tracks, and work on sound design and non-musical audio.
   - **Audacity** = Audacity is a software that enables the user to record and edit audio for free cost. It has simple and user-friendly interface and also offers cross-platform compatibility. There are many features, for example Record live sound and audio playback on a PC, convert music tapes and save them to MP3 o CD, edit multiple audio formats such as MP2, MP3, AIFF, WAV, and FLAC, take different sound documents and duplicate, cut, blend, or graft them together, change the pitch or speed of a sound recording.

2. **Graphics and Image Editing:**
   - **Adobe Photoshop** = Adobe Photoshop is a powerful and versatile tool widely used for graphics and image editing. It offers an extensive range of features and tools that allow users to enhance, manipulate, and create stunning visuals. With Photoshop, you can perform tasks like retouching photos, adjusting colors and tones, creating complex compositions, applying filters and effects, and much more. It supports various file formats and provides advanced features like layers, masks, and customizable brushes, giving users precise control over their designs.
   - **GIMP** = GIMP, which stands for GNU Image Manipulation Program, is a free and open-source graphics editing software. It offers a wide array of tools and features similar to Adobe Photoshop, making it an excellent alternative for those on a budget or looking for open-source options. GIMP supports various file formats, allowing users to edit and manipulate images with ease. It includes features like layers, masks, filters, and customizable brushes.
3. **Video Editing:**
   - **Adobe Premiere Pro** = Adobe Premiere Pro is a leading video editing software used by professionals and enthusiasts alike. It offers a comprehensive set of tools and features to edit, refine, and create high-quality videos. Premiere Pro supports a wide range of video formats, allowing users to import and edit footage from various sources. It provides a timeline-based interface, where users can arrange clips, apply transitions and effects, adjust colors and audio, add titles and captions, and perform precise editing tasks.
   - **Final Cut Pro X** = Final Cut Pro X is a professional video editing software developed by Apple. It is known for its intuitive interface, powerful performance, and advanced features. Final Cut Pro X offers a range of tools for editing, organizing, and delivering videos. Users can import and edit videos in various formats, work with multiple streams of high-resolution footage, apply effects and transitions, enhance audio, and add graphics and titles. It also provides features like color grading, motion graphics, and 360-degree video editing.
4. **Animation:**
   - **Adobe Animate** = Adobe Animate is a versatile tool for creating interactive animations and multimedia content. It allows users to design and animate vector-based graphics, build interactive web content, and develop immersive multimedia experiences. With Animate, you can create animations, games, banners, and interactive presentations. It supports various output formats, including HTML5, WebGL, and video, enabling seamless integration with websites and mobile applications. Animate provides a range of animation tools, timeline-based editing, asset libraries, and interactivity options, making it a comprehensive solution for multimedia authoring.
   - **Toon Boom Harmony** = Toon Boom Harmony is a professional animation software widely used in the animation industry. It offers a range of tools and features for traditional, 2D, and 3D animation. Harmony provides a powerful drawing engine, allowing artists to create expressive and detailed animations. It

supports various animation techniques, such as traditional frame-by-frame animation, rigging, cut-out animation, and particle effects. Harmony offers advanced features like lip syncing, camera movements, compositing, and integration with other software.

5. **Multimedia Authoring:**
    - **Unity** = Unity is a versatile multimedia authoring tool primarily used for creating interactive and immersive 2D and 3D games, virtual reality (VR) experiences, and augmented reality (AR) applications. It provides a robust game engine and development environment that enables users to design, build, and deploy multimedia content across multiple platforms. Unity offers a wide range of features, including a visual editor, scripting capabilities, physics simulation, asset management, and cross-platform deployment options.
    - **Articulate Storyline** = Articulate Storyline is a popular multimedia authoring tool used for creating interactive e-learning courses. It provides a user-friendly interface and a range of built-in templates and assets that facilitate the creation of engaging multimedia content. Storyline offers features like slide-based authoring, trigger-based interactivity, built-in assessments, and a library of pre-built interactions.