

Project Name: Introduction to Electronic Discrete Components.

Introduction: Electronic discrete components are individual electronic devices, distinct from integrated circuits, that are used to build various electrical and electronic systems. This includes types of components such as resistors, capacitors, inductors, diodes, and transistors, as well as their functions and uses in practical circuit design.

Objectives: The objective of this project is to provide a practical demonstration of the concepts and principles learned from the book. The goal is to give hands-on experience in using electronic discrete components to build a simple circuit. By watching this video, one will be able to:

- Apply knowledge of resistors, capacitors, inductors, diodes, and transistors to a real-world circuit design.
- Gain hands-on experience in assembling and testing an electronic circuit.
- See the practical applications of the concepts and theories.
- Reinforce understanding of electronic discrete components and their role in electronic circuit design.

Overall, this project is designed to provide a fun and engaging way to reinforce one's understanding of electronic discrete components and their practical applications.

Project Timeframe:

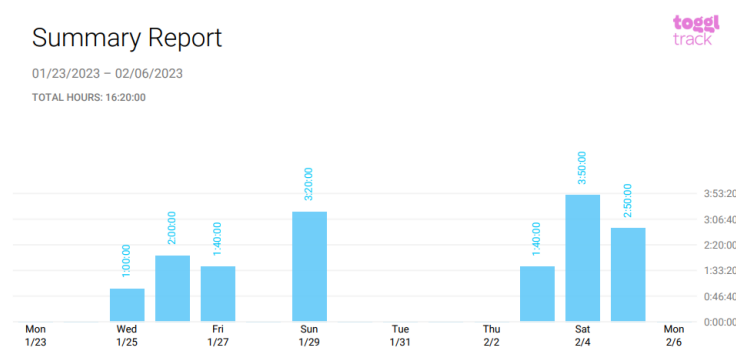


Figure 1: Summary Report

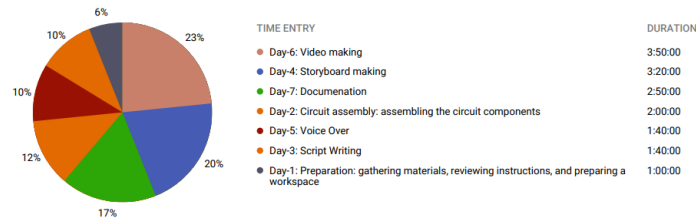


Figure 2: Details

Tools Used:

1. Electronic Components - including resistors, capacitors, inductors, diodes, and transistors, as well as other electronic components as needed
2. Audio Editing Tools- MIDI.
3. Video Editing Tools- Kdenlive, GIMP.
4. Presentation Tools- Canva, Google Slides.
5. Documentation Tools- Overleaf, Google Docs.
6. Collaboration Tools- GitHub.
7. Communication Tools- Slack, Telegram.
8. Time Tracking Tools- Toggl.

Conclusion:

Electronic discrete components play a crucial role in the functioning of various electronic devices and systems. From resistors and capacitors to transistors and diodes, these components are responsible for controlling, storing, and directing electrical energy to perform specific tasks. With advances in technology and manufacturing processes, electronic discrete components have become smaller, more reliable, and more efficient. As the demand for electronic devices continues to increase, the market for electronic discrete components will likely grow as well. It is important for engineers, technicians, and other professionals in the electronics industry to have a good understanding of these components and their applications to design and build effective electronic systems.