

# [Integrated rotating projector and tablet](https://assignbuster.com/integrated-rotating-projector-and-tablet/)

[Business](https://assignbuster.com/essay-subjects/business/), [Company](https://assignbuster.com/essay-subjects/business/company/)

Integrated Rotating Projector and Tablet A Project Study Presented to The Faculty of Electrical Engineering Department College of Engineering Technological University of the Philippines Manila In Partial Fulfilment Of the Course Requirements for the Degree Bachelor of Science in Electrical Engineering Laureles, Michael Mamaradlo, Carlo Angelo D. Maninang, Lezlie P. Sarmiento, John Evan Somil, Christian Jerwinne M. Vidal, Michael Angelo D. ABSTRACT This project study, Integrated Rotating Projector and Tablet was developed to provide an easier and convenient way of teaching in class by using projector. The study focused on controlling the rotation of the projector and projecting presentations by the used of tablet pc wirelessly. The project development covers a range of activities extending from researching to planning the project design, from fabrication to testing of the product, and from assessment and evaluation up to the releasing of the Integrated Rotating Projector and Tablet. The Integrated Rotating Projector and Tablet was successfully made of 220-volt, RC servo motor, transmitter and receiver. Result from the experiments in prototype shows that the project is capable and limited in rotating the projector and projecting wirelessly. Moreover, it can rotate and project in accurate angle. APPROVAL SHEET The project study entitled, INTEGRATED ROTATING PROJECTOR AND TABLET prepared and submitted by LAURELES, Michael ., MAMARADLO, Carlo Angelo D., MANINANG, Lezlie P., SARMIENTO, John Evan M., SOMIL, Christian Jerwinne M., and VIDAL, Michael Angelo D. in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN ELCECTRICAL ENGINEERING is hereby approved and accepted. Approved: | | | | | Engr. GILBERT B. HOLLMAN | | Adviser | | | | | | | | | | Engr. LYNDON R. BAGUE | Engr. ROVENSON V. SEVILLA | Engr. ROEL M. MENDOZA | | | | | | | | | | Engr. REY S. JUGANAS | Engr. JOVENCIO V. MERIN | ENGR. JOHN CARLO FELIZARDO | | | | Engr. GERSAM DEQUITO | Accepted in partial fulfillment of the requirements for the degree BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING. | Engr. SIMPLICIO F. CORTEZ, Jr. | | Dr. MELITO A. BACCAY | | Department Head | | Dean, College of Engineering | To God… To our Family… To our Friends… To our Professors… And to those who believe in us… AKNOWLEDGEMENT First and foremost, the researchers would like to thank our God almighty for the blessing and guidance that he showered them to be able to produced a successful project study. The proponents with deepest sincerity of appreciation, would like to express their gratitude to the persons that supported and believed them in making this project possible. They would like to show their gratefulness for having Engr. Gilbert B. Hollman for being a broadminded and patient adviser in helping them bring the best out of them and inspiring them to solve every problem that they are encountering with confidence. The researchers would also want to express their heartfelt thanks to engr. June Anthony Asistio in helping them find the right materials in making the project a success. The proponents would like to extend their appreciation to the panelist who guided them in improving their project especially, to the Electrical Engineering Department Professors and to their College Dean, Dr. Melito A. Baccay. They would like to express their greatest gratitude to their parents unconditional love and understanding. Without their financial and moral support this project would not have been made. Lastly special thanks to our fellow electrical engineering students that shared their spare time in listening to them and support them. TABLE OF CONTENTS | | | | | Page | | Title Page | |……………………………………………………… | | i | | Abstract | |……………………………………………………… | | ii | | Approval Sheet | |……………………………………………………… | | iii | | Dedication | |……………………………………………………… | | iv | | Acknowledgement | |……………………………………………………… | | v | | Table of Contents | |……………………………………………………… | | vi | | List of Tables | |……………………………………………………… | | x | | List of Figures | |……………………………………………………… | | xi | | Chapter 1 | THE PROBLEM AND ITS BACKGROUND | | | | | Introduction | |……………………… | | 1 | | | Background of Study | |……………………… | | 2 | | | Conceptual Framework | |……………………… | | 3 | | | Objectives | |……………………… | | 5 | | | Scope and Delimitations | |……………………… | | 6 | | | Significance of the Study | |……………………… | | 6 | | | Definition of Terms | |……………………… | | 7 | | | | | | | | | Chapter 2 | REVIEW OF RELATED LITERATURE AND STUDIES | | | | | Conceptual Literature | |……………………… | | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | Chapter 3 | METHODOLOGY | | | | | | | Research Project Design | |……………………… | | 13 | | | Project Development | |……………………… | | 13 | | | Operation and Testing Procedure | |……………………… | | 17 | | | Evaluation Procedures | |……………………… | | 17 | | | Instruments and Other Techniques Used | |……………………… | | 19 | | | | | | | | | Chapter 4 | RESULTS AND DISCUSSION | | | | | | | Technical Description of the Project | |……………………… | | 20 | | | Project Structure and Organization | |……………………… | | 20 | | | Project Capabilities and Restrictions | |……………………… | | 23 | | | Tests and Evaluation Results | |……………………… | | 24 | | | | | | | | | Chapter 5 | CONCLUSIONS & RECOMMENDATIONS | | | | Summary of Findings | |……………………… | | 25 | | | Conclusions | |……………………… | | 25 | | | Recommendations | |……………………… | | 26 | | | References | |……………………… | | 27 | | | Appendices | | | | | | | | | | | | | | A. Computation of Expenses | |……………………… | | 29 | | | Researchers’ Profile | |……………………… | | 31 | LIST OF TABLES | Table No. | Title | | | | Page | | 4. 1 | Result of Testing | | | | 13 | LIST OF FIGURES | Figure no. | Title | Page | | 1. 1 | Paradigm of the Study | 4 | | 3. 1 | Overview of the Project Development | 14 | | 4. 1 | Microcontroller | 20 | | 4. 2 | Audio-video sender | 21 | | 4. 3 | Pc to TV converter | 21 | | 4. 4 | Wi-fi Router | 22 | | 4. 5 | Tablet Pc | 22 | | 4. 6 | Projector | 23 | | 4. 7 | Mechanical arm | 23 |