

DEVELOPMENT OF A MINI CAD (COMPUTER-AIDED DESIGN) WHICH SUPPORTS 2D MODELING FOR BASIC ENGINEERING DRAWING

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ABSTRACT

This project addresses issues on implementation of CAD (Computer Aided Design) technology in engineering field. Engineering designers and entrepreneurs possess great powers of imagination and creativity especially this type of creativity is very essential during conceptualization phase. The intermediate phase of the design process equation, simulation involves modeling and analyzing the object. The final phase of design process, implementation refers to building manufacturing, testing and documenting the product. Objective of the development of CAD is to optimize design process. Before the product is modeled in the computer system, the parts coordinate and strategic points need to be determined. The constructing of geometric models is such as wireframes (showing only the edges of the object) or solid models (showing the surface of the object). These geometric models are constructed using CAD or geometric modeling system. The basic idea of CAD is design animation or 3D design visualization. One of the most popular 2D design annotation techniques is called view projection. Conversion from 3D to 2D visualization has certain rules and principles; however the aim of projection is to describe the shape and geometry of objects. During software design process, there are some difficulties in identifying any sequence activity. This system does not require any sequence of input and output as the user can use one tool interactively. The most appropriate diagram is UML (sequence or state activity diagram) for each process/ tool. This project is developed using VectorDraw OCX library in which this specified control has brought to some advantages during the development of the project.