

OBJECT ORIENTED WINDOWS BASED PROGRAMMING OF PLANAR MECHANISMS

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ABSTRACT

Over the past decade, we have seen the use of computer programming as an analytical tool propagates through many fields. Engineering, Mathematics, Physics and many other sciences have fully embraced this as a very useful tool. Unfortunately, programming has primarily taken the form of "console" applications. Console applications are the standard user-unfriendly prompt-based programs (i.e. DOS based or UNIX based programs). With the advent of the Macintosh and Windows operating systems, the user interface has become much easier if the programmer wanted to take advantage of the pre-compiled programming libraries. In many cases, this is usually not done due to the difficulty involved in learning how to do just this. What this thesis is going to do is to port over a console based program titled KAP for kinematic analysis program. The objective is to demonstrate how to apply object oriented Windows programming through the use of Visual C++ and Microsoft Foundation Classes (MFC). It is hoped that the reader will be encouraged by the results of the author and attempt to apply this to his/her own computer program projects of the future. Make no mistakes, the author has read ABUNDANT literature on the subject so please be careful to obtain excellent reference materials. When programming a single run application, a DOS based approach may be more effective, but when programming something for a possible customer use or repeated office use, a well thought out windows based program would be a better approach. At any rate, good reading and good luck!