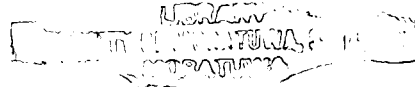




**UNIVERSITY OF MORATUWA
SRI LANKA**



**IMPLEMENTATION OF OPERATIONAL RESEARCH
MODELS IN JAVA PROGRAMMING**



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Master of Science in Operational Research

**Department of Mathematics
January 2005**

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**This thesis was submitted to the department of Mathematics
University of Moratuwa as partial fulfillment of the
requirements for the degree of Master of Science**

**Department of Mathematics
University of Moratuwa**

Sri Lanka

January 2005

DECLARATION

I hereby assure that this project report titled “IMPLEMENTATION OF OPERATIONAL RESEARCH MODELS IN JAVA PROGRAMMING”, is absolutely my own work and has never been produced earlier so far.

Name

Signature

Somasundaram Hemanand

UOM Verified Signature

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I assure that out of the best of my knowledge, that the information given is true and correct.

.....
Dr.M.Indralingam
(Supervisor)
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University of Moratuwa,
Sri Lanka

ABSTRACT

The selected area for Project is **“IMPLEMENTATION OF OPERATIONAL RESEARCH MODELS IN JAVA PROGRAMMING”**.

The idea of this thesis is to conduct a research activity about Operational Research education, difficulties in present graph Network theory Algorithms methods , Java programming education , incorporating java Applets for Operational Research education and finally to develop a applets learning / teaching system.

The objectives of developing visual processors to simulate the teaching process of graph Network theory algorithms and the exposition of their development have been set out by the terms of reference as follows:

1. Fill the void created by the lack of affordable Computer aided learning (CAL) software in the field of Graph Theory.
2. Encourage software developers to focus more on the development of affordable CAL systems by providing them with the basic structure of such designs.

This project was based on Structure Systems Analysis design Method (SSADM).

Java Development kit 1.3 (J.D.K 1.3) is used to creating the required system.

ACKNOWLEDGMENT

I like to express my deep gratitude and thanks to my supervisor Dr.M.Indralingam, Senior Lecturer , University of Moratuwa, Sri Lanka, for his excellent guidance and lectures, to write and complete this project work.

I would like to extend my sincere acknowledgements to all my colleges for their guidance and help me to complete this project successfully.

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