SIMULA

A language for programming and description of discrete event systems.

Introduction and user's manual

BY

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# Table of Contents

**Preface**

**Part I**

**Introduction**

**Chapter 1**

**Simulation and Discrete Event Systems**

1.1 The SIMULA Project  
1.2 Simulation  
1.3 SIMULA Design Objectives  
1.4 Discrete Event Systems  

**Part II**

**The SIMULA Language**

**Chapter 2**

**Processes**

2.1 Basic Properties  
2.2 The Sequence Control  
2.3 States  
2.4 Exogenous Attributes  

**Chapter 3**

**Elements and Sets**

3.1 Basic Concepts  
3.2 Elements and Element Variables  
3.3 Sets  
3.4 Element Expressions  
3.4.1 Generative expressions  
3.4.2 Set membership references  
3.5 Boolean Expressions  
3.6 Element Operations  
3.7 Non-elementary Procedures  
3.8 Examples  

**Chapter 4**

**Sequencing**

4.1 The Sequencing Set  
4.2 Sequencing Statements  
4.3 Scheduling Statements  
4.4 SQS Functions  
4.5 Examples
CHAPTER 5
CONNECTION

5.1 Connection Statements 39
5.2 Label Attributes 41
5.3 Examples 42

CHAPTER 6
THE MAIN PROGRAM 46

CHAPTER 7
RANDOM DRAWING

7.1 Pseudo-random Number Streams 48
7.2 Random Drawing Procedures 49

CHAPTER 8
DATA ANALYSIS 53

CHAPTER 9
THE SIMULA SYNTAX 64

9.1 The SIMULA Reference Language 64
9.2 Expressions 65
9.2.1 Element expressions 65
9.2.2 Set designators 65
9.3 SIMULA Statements 65
9.3.1 SIMULA blocks 66
9.3.2 Scheduling Statements 66
9.3.3 Connection statements 66
9.4 Activity Declarations 67
9.5 Syntax Restrictions 67

CHAPTER 10
THE UNIVAC 1107 SIMULA 68

10.1 The Language 68
10.2 Restrictions 68
10.3 Storage Requirements 69
10.4 Data De-allocation 70
10.5 Operating Instructions 73
10.6 Initial values 74
<table>
<thead>
<tr>
<th>PART III</th>
<th>SYSTEM DESCRIPTION</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER 11</td>
<td>ALGOL FUNDAMENTALS</td>
<td>75</td>
</tr>
<tr>
<td>11.1 Simple Variables and Declarations</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td>11.2 Statements and Programs</td>
<td></td>
<td>76</td>
</tr>
<tr>
<td>11.3 Compound Statements</td>
<td></td>
<td>77</td>
</tr>
<tr>
<td>11.4 Labels and go to - statements</td>
<td></td>
<td>78</td>
</tr>
<tr>
<td>11.5 if - then - statements</td>
<td></td>
<td>79</td>
</tr>
<tr>
<td>11.6 Arrays</td>
<td></td>
<td>81</td>
</tr>
<tr>
<td>11.7 for - statements</td>
<td></td>
<td>82</td>
</tr>
<tr>
<td>11.8 Blocks</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td>11.9 ALGOL Programs</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>11.10 Procedures</td>
<td></td>
<td>85</td>
</tr>
</tbody>
</table>

| CHAPTER 12                  | A SIMPLE SIMULA DESCRIPTION | 89   |
|                            | 12.1 A Simple Disease System |      |
|                            | 12.2 Details of the Element and Sequencing Procedures | 97   |
|                            | 12.3 Details of Scanning and Connection | 105  |

| CHAPTER 13                  | A WORKED EXAMPLE | 109  |
| Index of Library procedures |                    | 122  |
Preface to the 5th Edition

This report presents the SIMULA language. The first part, the chapter INTRODUCTION, contains a brief outline of the basic approach to system description and simulation reflected in the language. The second part, THE SIMULA LANGUAGE, gives the language definition and serves as a user's manual.

No comprehensive SIMULA textbook has been written, but two examples and some basic ALGOL 60 information are contained in part III.

SIMULA has been in increasing use at UNIVAC 1107 and 1108 installations since the beginning of 1965, and a revised version of "Report on the Use of SIMULA" is now being written, giving a survey of SIMULA jobs and application areas. The "SIMULA Tracing and Debugging System" is described in a separate report, and another report will be issued describing the procedures for giving output to the "KINGMATIC" drawing machine.

The changes from the first to the fifth edition of this manual consist mainly of the introduction of additional procedures and a worked example.

The authors have recently developed a new general programming language, named SIMULA 67. ("SIMULA 67 Common Base Definition", June 1967.) This language, now being implemented on various computers, is a major extension of the SIMULA presented in this manual. SIMULA 67 has also extended simulation capabilities over the present SIMULA.
Some of those who have contributed to SIMULA in various ways are mentioned in the introduction. We should also like to thank UNIVAC staff for assistanse, particularly Nicholas Hubacker and Joseph Speroni who helped us to find our way through the UNIVAC 1107 ALGOL compiler.

Björn Myhrhaug and Sigurd Kubosch have been members of our team for a long time, and their contributions have been indispensable.

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