



PROJECT REPORT

Snake Game Using BIOS Interrupt

	PERPUSTAKAAN
NO. INV : 218 / 5 / 1K / C. 1	
TGL : 7 Oktober 2013	
PARAF : 	

Herry Setiono

09.02.0027

2013

FACULTY OF COMPUTER SCIENCE
SOEGIJAPRANATA CATHOLIC UNIVERSITY

Jl. Pawiyatan Luhur IV/1, Bendan Duwur, SEMARANG 50234

Telp. 024-8441555 (hunting) Web: <http://www.unika.ac.id>

Email: ikom@unika.ac.id

APPROVAL AND RATIFICATION PAGE
PROJECT REPORT
Snake Game Using BIOS Interrupt

This project report has been approved and ratified by the Dean of faculty of
Computer Science and Supervisor on July 19th 2013

With Approval,

Examiners,



Hironimus Leong, S.Kom., M.Kom

NPP : 058.1.2007.273

Supervisor,



Suyanto E.A. Ir , M.sc

NPP : 058.1.1992.116

Examiners,



Shinta Estri Wahyuningrum, S.Si.,

NPP : 058.1.2007.272

Examiners,



Rosita Herawati, ST., MIT

NPP : 058.1.2004.263

Examiners,



R. Setiawan Aji Nugroho, ST., McompIT

NPP : 058.1.2004.264

Dean of Faculty of Computer Science,



Hironimus Leong, S.Kom., M.Kom

NPP : 058.1.2007.273

STATEMENT OF ORIGINALITY

Here by signed,

Name : Herry Setiono

ID : 09.02.0027

Certify that this project was made by myself and not copy or plagiarizes from other people, except that in writing expressed to the other article. If it is proven that this project was plagiarizes or copy the other, I am ready to accept a sanction.

Semarang, July 19th 2013



Herry Setiono

09.02.0027

FOREWORD

Thanks to God for the bless, I have been completed this project with title:

Snake game using BIOS interrupt

I in process complete program many people support and writer would thanks to:

1. My parents Rusbandi Abdullah, and Aily Chandra and my sisters Selvia Setiono and Yesica Setiono for their support, love, and pray.
2. Desca Meilia for their support, love, and pray.
3. All lecturers in Faculty of Computer Science.
4. All my best Friend in ikom and many more for support to finish this project. We are best friend forever.
5. IKOM SOEGIJAPRANATA CATHOLIC UNIVERSITY.

Finally,writer apologizes because this project is not perfect, Hopefully this project may be useful for everyone.

Semarang, July 19th 2013



Herry Setiono

09.02.0027

ABSTRACT

Snake game is a simple game that uses cursor. The cursor is moving around the computer screen and you can control it by press a certain button, if it hit a wall it will bounce and if hit its tail will end. In coding, game the user set keypress by in al. this game using w, a, s, d for moving w for up, a for left, s for down, and d for right. Writer created this program using BIOS interrupt 10h, for to manipulated the screen. To use this call, we must load AH with the number. Example: AH 02h for set cursor position, AH 03h for get cursor position and shape, and AH 09h for Write character and attribute at cursor position.

TABLE OF CONTENT

COVER.....	i
APPROVAL AND RATIFICATION PAGE.....	ii
STATEMENT OF ORIGINALITY.....	iii
FOREWORD.....	iv
ABSTRACT.....	v
TABLE OF CONTENT.....	vi
TABLE OF FIGURE.....	viii
TABLE OF TABLE.....	ix
CHAPTER I: INTRODUCTION.....	1
1.1 Background.....	1
1.2 Scope.....	1
1.3 Objective.....	1
CHAPTER II: LITERATURE STUDY.....	2
2.1 Bios	2
2.2 Assembly.....	3
2.3 Boot Process.....	3
2.4 MBR.....	3
CHAPTER III: PLANNING.....	4
3.1 Research Methodologies.....	4
3.2 Project Management.....	4
CHAPTER IV: ANALYSIS AND DESIGN.....	4
4.1 Boot Process.....	5
4.2 Booting From Harddisk.....	6
4.3 BIOS Interrupt.....	6

4.4 Keypress.....	7
CHAPTER V: IMPLEMENTATION AND TESTING.....	8
5.1 Implementation	8
5.2 Testing.....	15
CHAPTER VI: CONCLUSION AND FURTHER RESEARCH.....	18
6.1 Conclusion.....	18
6.2 Further Research.....	18
REFERENCE.....	19

TABLE OF FIGURE

Figure 4.1 Boot Process.....	5
Figure 4.2 Booting Harddisk.....	6
Figure 4.3 BIOS Int 10h	6
Figure 4.4 Keyboard Scan Codes.....	7
Figure 5.1 Program Start.....	8
Figure 5.2 Setting Keyboard.....	8
Figure 5.3 Print Character, Tail, Set Moving Keypress.....	10
Figure 5.4 Delete Tail.....	10
Figure 5.5 Print Character x.....	11
Figure 5.6 Delete Character.....	11
Figure 5.7 Read Position Tail.....	12
Figure 5.8 Write Position Tail.....	12
Figure 5.9 Moving Cursor.....	14
Figure 5.10 Setting Delay.....	14
Figure 5.11 Look Partition.....	15
Figure 5.12 Create New Partition.....	16
Figure 5.13 Setting Bootable.....	16
Figure 5.14 Compile Program.....	17
Figure 5.15 Make New Image.....	17
Figure 5.16 Insert Program To New Image.....	17
Figure 5.17 Program Working.....	17

TABLE OF TABLE

Table 3.1 Table Project Management.....	4
---	---