

**IMPLEMENTATION OF CUT OUT ANIMATION TECHNIQUE IN
2D ANIMATED FILM “CHILDHOOD COOKERY”**

THESIS

Submitted to fulfill one of the requirements for achieving a Bachelor's degree in the
Information Technology Study Program



Written by
Sayyidah Yumna Raihanah
21.60.0138

To

COMPUTER SCIENCE FACULTY
AMIKOM UNIVERSITY YOGYAKARTA
YOGYAKARTA
2025

IMPLEMENTATION OF CUT OUT ANIMATION TECHNIQUE IN 2D ANIMATION FILM “CHILDHOOD COOKERY”

THESIS

Submitted to fulfill one of the requirements for achieving a Bachelor's degree in the
Information Technology Study Program



Written by
Sayyidah Yumna Raihanah
21.60.0138

To

COMPUTER SCIENCE FACULTY
AMIKOM UNIVERSITY YOGYAKARTA
YOGYAKARTA
2025

HALAMAN PERSETUJUAN**SKRIPSI****IMPLEMENTASI TEKNIK ANIMASI CUT OUT PADA FILM ANIMASI 2D
“CHILDHOOD COOKERY”**

yang disusun dan diajukan oleh

Sayyidah Yumna Raihanah
21.60.0138

telah disetujui oleh Dosen Pembimbing Skripsi
pada tanggal 11 Agustus

Dosen Pembimbing,


Dhimas Adi Satria, S.Kom., M.Kom.
NIK. 190302427

HALAMAN PENGESAHAN**SKRIPSI****IMPLEMENTASI TEKNIK ANIMASI CUT OUT PADA FILM ANIMASI 2D
“CHILDHOOD COOKERY”**

yang disusun dan diajukan oleh

Sayyidah Yumna Raihanah

21.60.0138

Telah dipertahankan di depan Dewan Penguji
pada tanggal 11 Agustus

Susunan Dewan Penguji

Nama Penguji

Bernadhed, S.Kom., M.Kom.
NIK. 190302243

Bhanu Sri Nugraha, S.Kom., M.Kom.
NIK. 190302164

Dhimas Adi Satria, S.Kom., M.Kom.
NIK. 190302427

Tanda Tangan



Skripsi ini telah diterima sebagai salah satu persyaratan
untuk memperoleh gelar Sarjana Komputer
Tanggal 11 Agustus 2025

DEKAN FAKULTAS ILMU KOMPUTER



Prof. Dr. Kusrini, M.Kom.
NIK. 190302106

HALAMAN PERNYATAAN KEASLIAN SKRIPSI

Yang bertandatangan di bawah ini,

Nama mahasiswa : Sayyidah Yumna Raihanah

NIM : 21.60.0138

Menyatakan bahwa Skripsi dengan judul berikut:

Implementation of Cut-Out Animation Technique in 2D Animated Film "Childhood Cookery"

Dosen Pembimbing : Dhimas Adi Satria, S.Kom., M.Kom.

1. Karya tulis ini adalah benar-benar ASLI dan BELUM PERNAH diajukan untuk mendapatkan gelar akademik, baik di Universitas AMIKOM Yogyakarta maupun di Perguruan Tinggi lainnya.
2. Karya tulis ini merupakan gagasan, rumusan dan penelitian SAYA sendiri, tanpa bantuan pihak lain kecuali arahan dari Dosen Pembimbing.
3. Dalam karya tulis ini tidak terdapat karya atau pendapat orang lain, kecuali secara tertulis dengan jelas dicantumkan sebagai acuan dalam naskah dengan disebutkan nama pengarang dan disebutkan dalam Daftar Pustaka pada karya tulis ini.
4. Perangkat lunak yang digunakan dalam penelitian ini sepenuhnya menjadi tanggung jawab SAYA, bukan tanggung jawab Universitas AMIKOM Yogyakarta.
5. Pernyataan ini SAYA buat dengan sesungguhnya, apabila di kemudian hari terdapat penyimpangan dan ketidakbenaran dalam pernyataan ini, maka SAYA bersedia menerima SANKSI AKADEMIK dengan pencabutan gelar yang sudah diperoleh, serta sanksi lainnya sesuai dengan norma yang berlaku di Perguruan Tinggi.

Yogyakarta, 11 Agustus 2025

Yang Menyatakan,

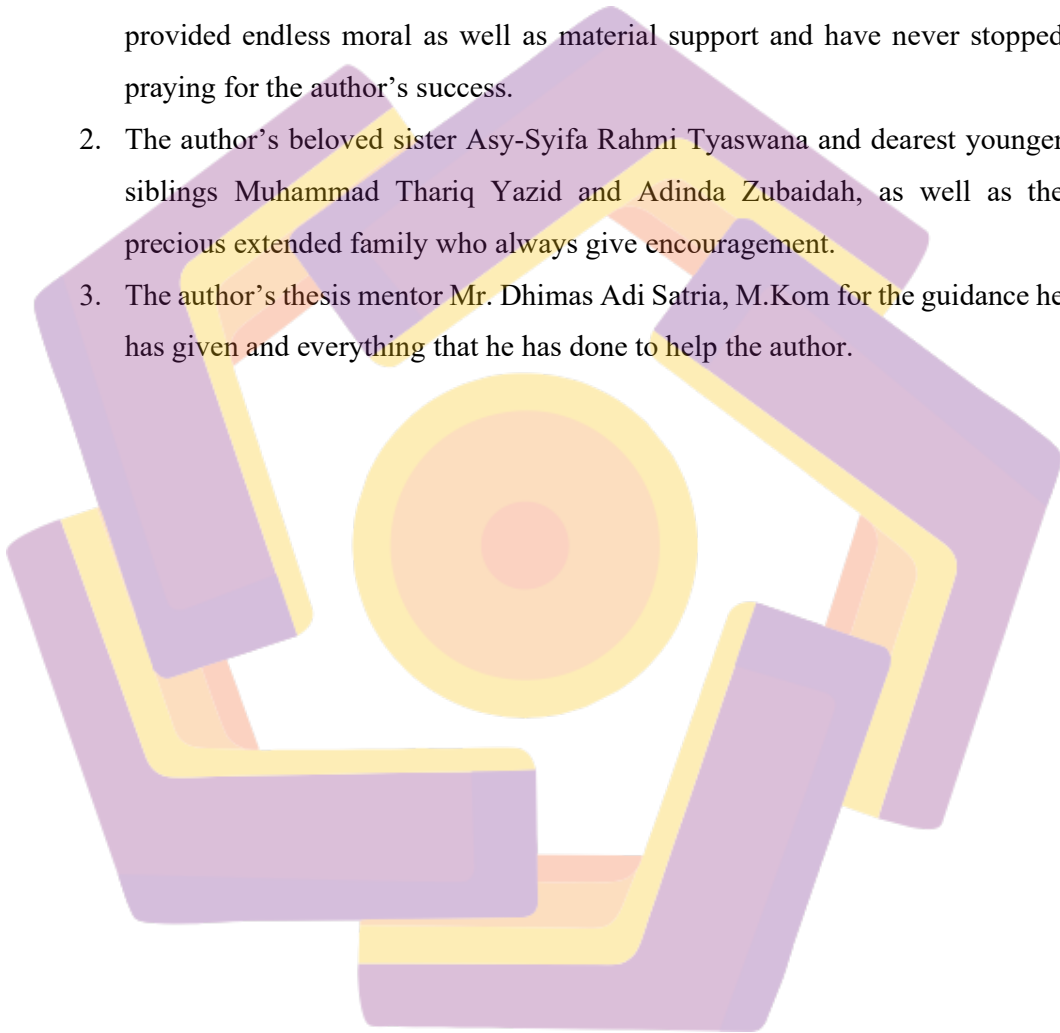


Sayyidah Yumna Raihanah

ACKNOWLEDGEMENT

With pride and wholeheartedly, the author dedicates this thesis to this line up of amazing people:

1. Mrs. Tanty Wulandari and Mr. Akhmad Shodiq as the author's parents have provided endless moral as well as material support and have never stopped praying for the author's success.
2. The author's beloved sister Asy-Syifa Rahmi Tyaswana and dearest younger siblings Muhammad Thariq Yazid and Adinda Zubaidah, as well as the precious extended family who always give encouragement.
3. The author's thesis mentor Mr. Dhimas Adi Satria, M.Kom for the guidance he has given and everything that he has done to help the author.



FOREWORD

By offering worship and gratitude to the presence of Allah SWT who has bestowed His grace so that the author can complete this thesis with the title "Implementation of Cut Out Animation Techniques in the 2D Animation Film "Childhood Cookery"", as one of the requirements for completing the Bachelor's Degree Program (S1) Department of Information Technology in Amikom University. The author realizes that this thesis would not have been made possible without the support, assistance, guidance and advice from various parties during the preparation of this thesis. On this occasion the author expresses her sincere thanks to:

1. Mr. Prof. Dr. M. Suyanto, MM, as the chancellor of Amikom University Yogyakarta.
2. Mr. Agus Purwanto M.Kom., as Head of the Information Technology Study Program at Amikom University Yogyakarta.
3. Mr. Dhimas Adi Satria, S.Kom., M.Kom., as the thesis supervisor for all the guidance and suggestions given to the author so that this thesis can be completed well.
4. All lecturers at the Computer Faculty of Amikom University, who have provided invaluable knowledge while the author was studying at the Amikom Yogyakarta Computer Faculty.
5. Beloved mother and father who have always prayed and given encouragement to the author to complete the thesis.
6. Beloved siblings and relatives have done so much to give encouragement to the author to complete the thesis.
7. Friends from BCIT 21 that have accompanied the author throughout this journey and have helped and encouraged her to finish this thesis.
8. Dear friends Alex and Nuha who have helped and accompanied the author writing her thesis, with Taka (Raffaela), Marsie, Alvin, Puri and Ara who have provided endless support.
9. Friends from IKAGO Corps (JMK48), Derapcgoon, Kimi Ga Bersinar, DRCI, QSMP, Traffic Life Series, Lifesteal SMP, Parkour Civilization, Detective

Conan, and Hundred Line fandom circles who have accompanied and given mental support to the author.

10. Artist friends who have given me encouragement and advice in the making of the thesis product.
11. Content creator Grian, GoodTimesWithScar, Smallishbeans, Pangi, Derapchu, PrinceZam, ParrotX2, Technoblade, Evbo, Seawattgaming, Tubbo, Foolish, Chuckle Sandwich Podcast, Kubz Scouts, Ludwig and many more who had provided entertainment for the author during the making of this thesis product.
12. All parties who have helped until the completion of the thesis which cannot be mentioned one by one.

In carrying out this research, even though the author has tried her best, of course there are still many shortcomings and limitations. Nevertheless, the author hopes that this work will be beneficial to those who seek it.

Yogyakarta, 16th of February 2025



Sayyidah Yumna Raihanah

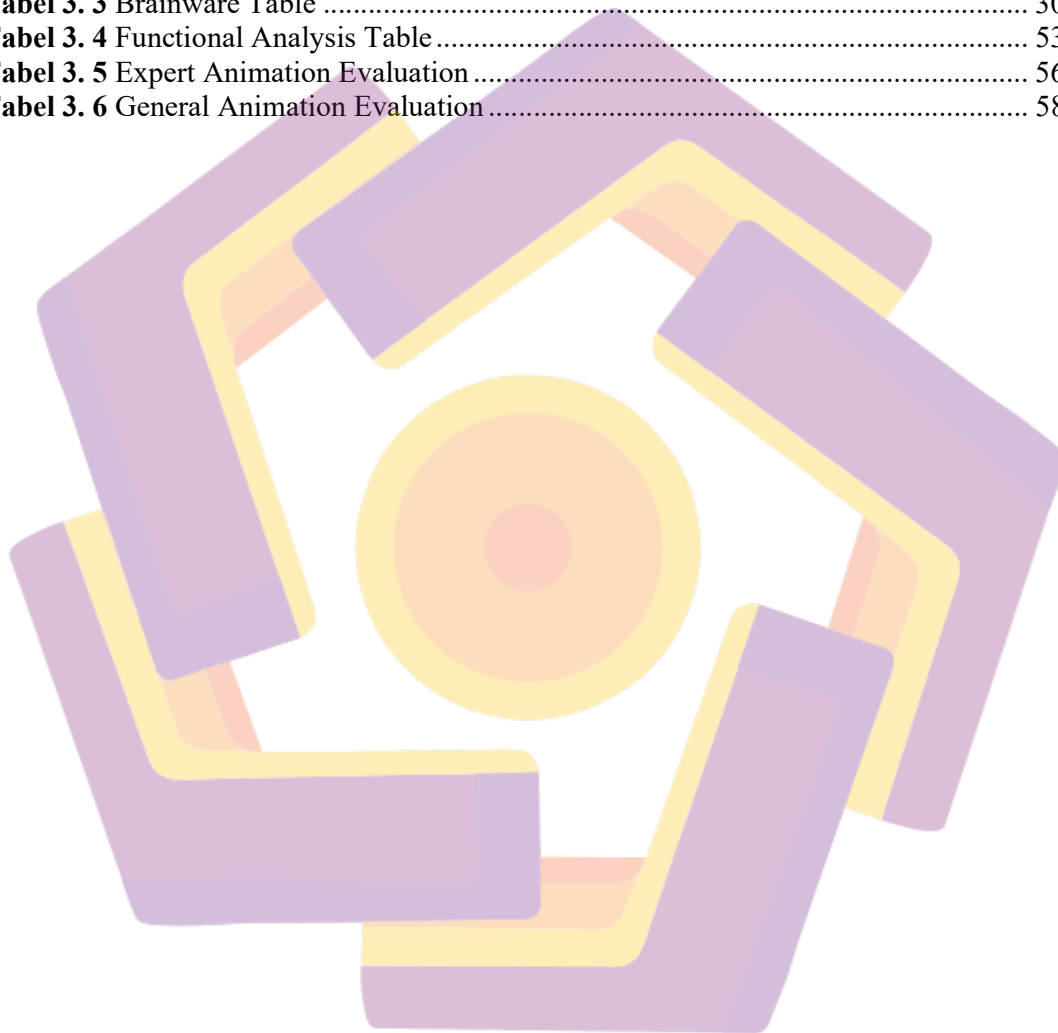
TABLE OF CONTENTS

HALAMAN JUDUL	i
HALAMAN PERSETUJUAN	ii
HALAMAN PENGESAHAN	iii
HALAMAN PERNYATAAN KEASLIAN SKRIPSI	iv
ACKNOWLEDGEMENT	v
FOREWORD	vi
LIST OF TABLES	x
LIST OF IMAGES	xi
LIST OF ATTACHMENTS	xiii
INTISARI	xiv
ABSTRACT	xv
CHAPTER I INTRODUCTION	1
1.1 Background	1
1.2 Problem Formulation	2
1.3 Scope of Research Problem.....	2
1.4 Research Purposes	3
1.5 Research Benefits	3
1.6 Research Methods	3
1.6.1 Collecting Data Method	3
1.6.2 Method of Analysis	4
1.6.3 Method of Production	4
1.6.4 Method of Evaluation	4
1.7 Systematics of Writing	4
CHAPTER II FRAMEWORK AND OVERVIEW	6
2.1 Literature Overview	6
2.2 Theoretical Basis.....	10
2.2.1. Definition and History of Animation	10
2.2.2. Type of Animations	10
2.2.3. 12 Basic Principles of Animation	12
2.2.4. 2D Animation Techniques	17

2.2.5. Production Process	18
2.3 Evaluation.....	21
2.3.1 Questionnaire.....	21
2.3.2 Likert Scale.....	22
CHAPTER III RESEARCH METHODS	24
3.1 Research Overview	24
3.2 Research Flow	25
3.3 Data Collection.....	25
3.3.1. Observation.....	25
3.4 Analysis Requirements.....	27
3.4.1. Functional Assessment Requirements.....	27
3.4.2. Non-Functional Assessment Requirements.....	28
3.5. Production Aspect Assessment.....	30
3.5.1. Creative Production Aspect.....	30
3.5.2. Technical Production Aspect.....	31
3.6 Pre Production.....	32
3.6.1. Story Idea.....	32
3.6.2. Concept Art.....	33
CHAPTER IV. RESULT AND DISCUSSION.....	37
4.1 Production.....	37
4.1.1 Assets.....	37
4.1.2 Animating Process.....	42
4.2 Post Production.....	49
4.3 Evaluation.....	53
CHAPTER V. CONCLUSION.....	62
5.1 Summary.....	62
5.2 Suggestion.....	62
REFERENCE	63
ATTACHMENT.....	64

LIST OF TABLES

Tabel 2. 1 Research Authenticity.....	7
Tabel 2. 2 Likert Chart Formula Table.....	22
Tabel 3. 1 Hardware Table	28
Tabel 3. 2 Software Table.....	29
Tabel 3. 3 Brainware Table	30
Tabel 3. 4 Functional Analysis Table.....	53
Tabel 3. 5 Expert Animation Evaluation	56
Tabel 3. 6 General Animation Evaluation	58



LIST OF IMAGES

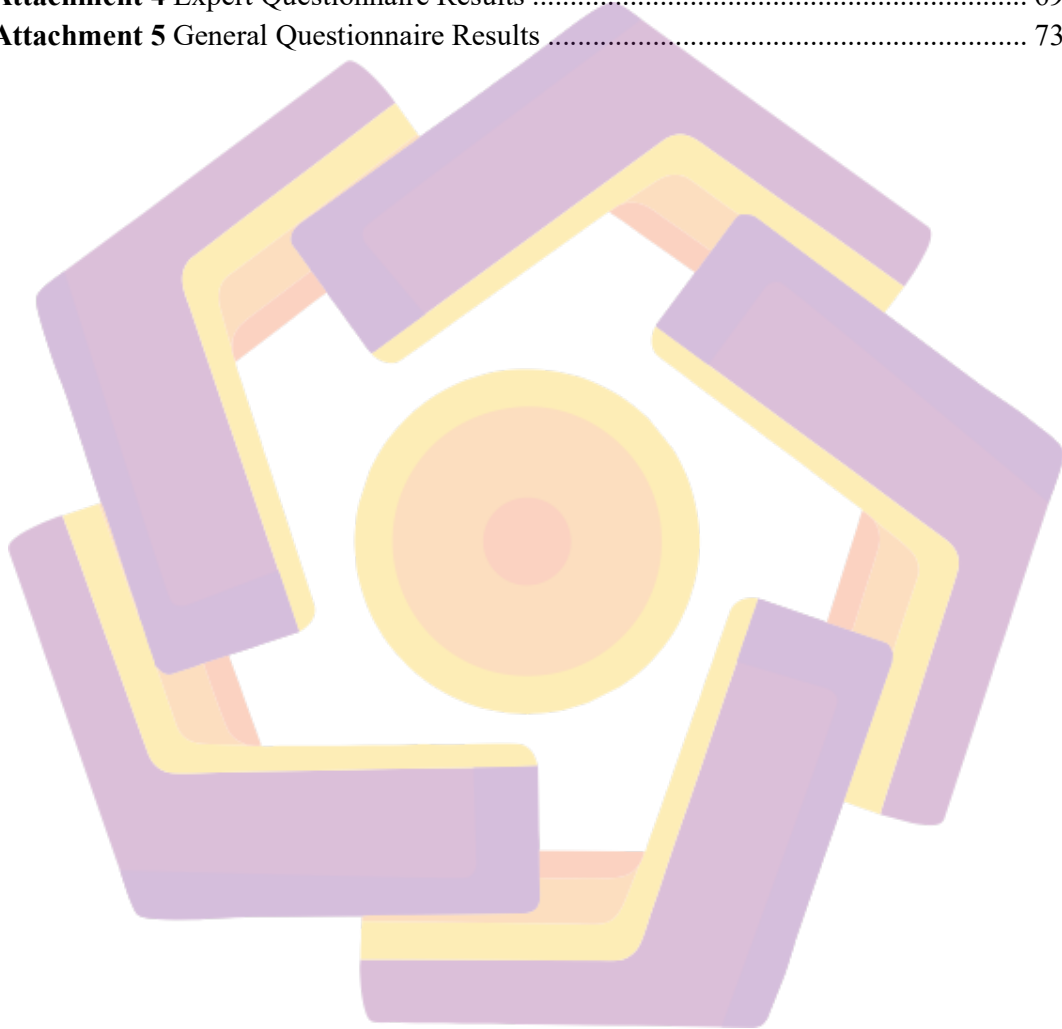
Image 2. 1 Stop Motion Cutting Animation.....	10
Image 2. 2 Process of 2D Animation	11
Image 2. 3 Process of 3D Animation	11
Image 2. 4 The making of Motion Graphic.....	12
Image 2. 5 Solid Drawing and Design of a Character.....	12
Image 2. 6 Squash and Stretch example.....	13
Image 2. 7 Anticipation Principle example.....	13
Image 2. 8 Ease In and Ease Out Example	13
Image 2. 9 Secondary Action Running Example.....	14
Image 2. 10 Straight Ahead and Pose to Pose Example.....	14
Image 2. 11 Staging Example	15
Image 2. 12 Follow Through and Overlapping Action Example.....	15
Image 2. 13 Drawing on “Ones” Timeline example	16
Image 2. 14 Arcs Example.....	16
Image 2. 15 Exaggeration Example	17
Image 2. 16 Character Appeal Example.....	17
Image 2. 17 Script Example	19
Image 2. 18 Character Design Fullbody Example	19
Image 2. 19 Storyboard and Animatic Example	20
Image 3. 1 Research Flow	25
Image 3. 2 Screenshot of the animated series “Yumeiro Pâtissière”	26
Image 3. 3 Petualangan Kuliner Zoe Book Covers.....	26
Image 3. 4 Screenshot of “The Life Series and Empires SMP Minecraft Fan Animation Compilation”	27
Image 3. 5 Screenshot of “Childhood Cookery” Script	32
Image 3. 6 “Childhood Cookery” Concept Art Book Cover.....	33
Image 3. 7 Rania Mawari Character Design	34
Image 3. 8 Ayu Cendrawasih Character Design	34
Image 3. 9 Ayu’s Room	35
Image 3. 10 “Childhood Cookery” Title Art.....	35
Image 3. 11 Progress Storyboard of “Childhood Cookery”	35
Image 4. 1 Shot 12 Character Sketch	37
Image 4. 2 Shot 12 Character Base Color	38
Image 4. 3 Shot 12 Character Coloring.....	39
Image 4. 4 Shot 12 Character Coloring Expression	39
Image 4. 5 Indonesian Food Sketch	40
Image 4. 6 Indonesian Food Base Color	40
Image 4. 7 Indonesian Food Full Color.....	40
Image 4. 8 Rania’s Room Background Sketch	41
Image 4. 9 Rania’s Room Background Lineart.....	41
Image 4. 10 Rania’s Room Background Full Color.....	42
Image 4. 11 Screenshot of the Adobe Animate Home Display	42

Image 4. 12 Screenshot of Importing the Background Asset.....	43
Image 4. 13 Screenshot of Importing Character and Item Assets	43
Image 4. 14 Screenshot of Shot 9 Inserting Keyframe	44
Image 4. 15 Screenshot of Shot 9 Transform Option.....	45
Image 4. 16 Screenshot of Shot 9 Timeline for Tweening.....	45
Image 4. 17 Screenshot of Shot 9 Importing Background	46
Image 4. 18 Screenshot of Shot 11 Importing Assets	47
Image 4. 19 Screenshot of Shot 11 Inserting Keyframes and Classic Tween.....	48
Image 4. 20 Screenshot of Shot 11 Importing Moving Background	48
Image 4. 21 Screenshot of Shot 11 Background Motion Tweening Timeline.....	49
Image 4. 22 Screenshot of Shot 30 of Camera Movement.....	50
Image 4. 23 Screenshot of Shot 22 of Character Cooking	50
Image 4. 24 Screenshot of Swivel App Conversion.....	51
Image 4. 25 Screenshot of the DaVinci Editing Timeline	51
Image 4. 26 Screenshot of the DaVinci Effects Tab	52
Image 4. 27 Screenshot of DaVinci Editing Media Pool	52
Image 4. 28 Screenshot of the DaVinci Delivery Tab	53



LIST OF ATTACHMENTS

Attachment 1 Supervisor Approvement Letter	64
Attachment 2 Story Script	65
Attachment 3 Storyboard Film	66
Attachment 4 Expert Questionnaire Results	69
Attachment 5 General Questionnaire Results	73



INTISARI

Film animasi 2D berjudul “Childhood Cookery” merupakan animasi fiksi yang menceritakan tentang tokoh utama bernama Rania yang meninggalkan hobi karena memasak mengingatkan Rania tentang mendiang ibunya yang sering memasak walau tubuhnya sekian hari semakin lemah. Setelah gadis itu tidak sengaja menemukan video tutorial memasak makanan favorit ibunya di internet, ia sadar bahwa daripada menghindarinya, dia harus menghadapi ketakutannya dan berdamai dengan masa lalu. Rania mencoba untuk kembali menekuni hobi tersebut agar memori ibunya tidak akan terlupakan. Film animasi ini memanfaatkan salah satu teknik animasi yang bernama teknik cut out.

Animasi cut out adalah teknik animasi yang menggabungkan potongan-potongan gambar sesuai bentuk sehingga terlihat bergerak. Bagian tubuh karakter seperti kepala, tangan, kaki, mata dan mulut dipotong dan diubah untuk menciptakan ilusi dengan rentang pergerakan yang seolah-olah hidup. Animasi cut out merupakan salah satu bentuk teknik animasi tertua yang menggerakkan karakter dan aset latar belakang untuk menyampaikan sebuah cerita.

Proses pembuatan film animasi 2D “Childhood Cookery” menggunakan teknik animasi cut out yang banyak diterapkan pada pergerakan aset latar belakang dan karakter. Animasi ini menggunakan teknik tersebut pada gerakan seperti berjalan, gestur tangan, aset latar belakang, efek asap makanan dan ekspresi. Oleh karena itu, akan dianalisa bagaimana proses pembuatan aset, pergerakan karakter dan objek gambar dalam perancangan animasi ini.

Kata kunci: Film Animasi 2D, Cut Out, Makanan, Childhood Cookery

ABSTRACT

The 2D animated film titled “Childhood Cookery” is a fictional animation that tells a story about the main character named Rania who gave up her hobby because cooking reminds Rania of her late mother who often cooked for her even though her body was getting weaker over the days. After the girl stumbled upon a cooking tutorial video of her mother’s favorite food on the internet, she realized that instead of avoiding it, she had to face her fears and make peace with the past. Rania soon tried to return to this hobby so that her mother’s memories would not be forgotten. This animation film uses an animation technique called the cut out technique.

Cut out is an animation technique that combines pieces of an image to follow shapes so that it looks like it’s moving. Character body parts like head, hands, eyes and mouth are cut and altered to create illusions of lifelike range of movements. Cut out animation is one of the oldest forms of animation techniques that moves characters and background assets to tell a story.

The process of making the 2D animated film "Childhood Cookery" uses cut out animation techniques which are widely applied to the movement of background assets and characters. This animation uses this technique in movements such as walking, hand gestures, background assets, food smoke effects and expressions. Therefore, we will analyze how assets, character movements and image objects were created and animated in designing this animation.

Keywords: 2D Animated Film, Cut Out, Food, Childhood Cookery