

## **Daftar Isi**

<i>ABSTRAKSI</i> .....	i
<i>ABSTRACT</i> .....	ii
LEMBAR PERNYATAAN.....	iii
LEMBAR PENGESAHAN .....	iv
KATA PENGANTAR .....	v
Daftar Isi .....	vi
Daftar Gambar .....	ix
Daftar Tabel .....	x
BAB 1. PENDAHULUAN .....	1-1
1.1. Latar Belakang .....	1-1
1.2. Rumusan Permasalahan.....	1-2
1.3. Batasan Masalah.....	1-2
1.4. Tujuan & Manfaat Penelitian .....	1-2
<b>1.4.1 Tujuan Penelitian</b> .....	1-2
<b>1.4.2 Manfaat Penelitian</b> .....	1-2
1.5. Ruang Lingkup & Batasan Penelitian .....	1-3
1.6. Metodologi Penelitian .....	1-3
<b>1.6.1 Metode Pengumpulan Data</b> .....	1-3
<b>1.6.2 Metode Pengembangan Sistem</b> .....	1-3
<b>1.6.3 Metode Pengujian</b> .....	1-3
1.7. Sistematika Penulisan Laporan .....	1-4
<b>1.7.1 Pendahuluan</b> .....	1-4
<b>1.7.2 Landasan Teori</b> .....	1-4
<b>1.7.3 Analisis Sistem</b> .....	1-4
<b>1.7.4 Perancangan Sistem</b> .....	1-4
<b>1.7.5 Implementasi Dan Pengujian</b> .....	1-4
<b>1.7.6 Penutup</b> .....	1-4
<b>1.7.7 Daftar Pustaka</b> .....	1-5
BAB 2. LANDASAN TEORI .....	2-1
2.1. Penelitian Terkait .....	2-1
2.2. Interaksi Antar Objek .....	2-2
2.3. Augmented Reality .....	2-3
<b>2.3.1 Teknik Tracking pada Augmented Reality</b> .....	2-5
2.4. Vuforia Qualcomm.....	2-6
<b>2.4.1 QCAR SDK Vuforia</b> .....	2-7

<b>2.4.2</b>	<b>Image Target .....</b>	2-7
<b>2.4.3</b>	<b>Natural Features and Rating .....</b>	2-10
<b>2.4.4</b>	<b>Target Management System .....</b>	2-13
2.5.	Android.....	2-14
<b>2.5.1</b>	<b>The Dalvik Virtual Machine (DVM ) .....</b>	2-14
<b>2.5.2</b>	<b>Android SDK (Software Development Kit).....</b>	2-15
<b>2.5.3</b>	<b>Android Development Tool.....</b>	2-15
2.6.	Unity 3D.....	2-16
2.7.	Adobe Photoshop .....	2-17
2.8.	Unified Modelling Language (UML).....	2-19
<b>2.8.1</b>	<b>Use Case Diagram .....</b>	2-19
<b>2.8.2</b>	<b>Activity Diagram .....</b>	2-20
<b>2.8.3</b>	<b>Sequence Diagram .....</b>	2-22
<b>2.8.4</b>	<b>Class Diagram .....</b>	2-23
2.9.	Metodelogi Pengembangan Multimedia .....	2-24
2.10.	Metodelogi Pengujian Perangkat Lunak .....	2-26
<b>2.10.1</b>	<b>White Box Testing.....</b>	2-26
<b>2.10.2</b>	<b>White Box Testing.....</b>	2-26
BAB 3.	ANALISA SISTEM .....	3-1
3.1.	Analisis Sistem.....	3-1
<b>3.1.1</b>	<b>Analisis kebutuhan Data dan Materi .....</b>	3-1
<b>3.1.2</b>	<b>Analisis Tokoh Pahlawan Indonesia .....</b>	3-1
<b>3.1.3</b>	<b>Analisis Tarian Indonesia .....</b>	3-3
<b>3.1.4</b>	<b>Analisis Arsitektur Sistem.....</b>	3-7
3.2.	Analisis Kebutuhan Fungsional .....	3-7
<b>3.2.1</b>	<b>Analisis Kebutuhan Software .....</b>	3-7
<b>3.2.2</b>	<b>Analisis Kebutuhan Hardware .....</b>	3-8
3.3.	Alur Penelitian.....	3-9
BAB 4.	PERANCANGAN APLIKASI.....	4-1
4.1.	Perancangan Desain .....	4-1
<b>4.1.1</b>	<b>Arsitektur Sistem Usulan .....</b>	4-1
4.2.	Perancangan UML ( <i>Unified Modelling Language</i> ) .....	4-2
<b>4.2.1</b>	<b>Use Case Diagram .....</b>	4-2
<b>4.2.2</b>	<b>Definisi Use Case .....</b>	4-3
<b>4.2.3</b>	<b>Skenario Use Case.....</b>	4-4
<b>4.2.4</b>	<b>Activity Diagram.....</b>	4-9
<b>4.2.5</b>	<b>Sequence Diagram .....</b>	4-11

4.3.	Perancangan Sistem Marker.....	4-12
4.4.	Perancangan Tampilan Aplikasi.....	4-13
BAB 5.	IMPLEMENTASI DAN PENGUJIAN .....	5-1
5.1.	Implementasi Perangkat Lunak .....	5-1
5.2.	Implementasi Perangkat Keras .....	5-1
5.3.	Implementasi <i>Interface</i> .....	5-2
5.3.1	<b>Splashscreen .....</b>	5-2
5.3.2	<b>Loading Bar .....</b>	5-2
5.3.3	<b>Halaman Menu Utama .....</b>	5-3
5.3.4	<b>Tampilan Informasi Pembuat Aplikasi .....</b>	5-3
5.3.5	<b>Tampilan Halaman Menu AR .....</b>	5-4
5.3.6	<b>Tampilan Halaman Panduan.....</b>	5-4
5.3.7	<b>Tampilan Scene Pahlawan .....</b>	5-5
5.3.8	<b>Tampilan Scene Tarian .....</b>	5-5
5.4.	Implementasi Objek 2D .....	5-6
5.5.	Pengujian Sistem .....	5-8
5.5.1	<b>Skenario Pengujian Black Box .....</b>	5-10
5.5.2	<b>Analisa Hasil Pengujian .....</b>	5-13
5.5.3	<b>Pengujian Perangkat Android.....</b>	5-13
5.5.4	<b>Pengujian Intensitas Cahaya .....</b>	5-15
5.5.5	<b>Pengujian Oklusi.....</b>	5-16
5.5.6	<b>Pengujian Akurasi .....</b>	5-17
5.5.7	<b>Pengujian Jarak.....</b>	5-18
BAB 6.	PENUTUP .....	6-1
6.1.	Kesimpulan.....	6-1
6.2.	Saran.....	6-1
<b>Daftar Pustaka .....</b>	A	
<b>Lampiran .....</b>	B	