

Lampiran 2 - Kuesioner Pengujian Aplikasi

1. Nama responden yaitu 10 Anak

Nazwa 13 Tahun

Kiki 13 Tahun

Amanda 13 Tahun

Shafa 13 Tahun

Fikri 14 Tahun

Rizki 14 Tahun

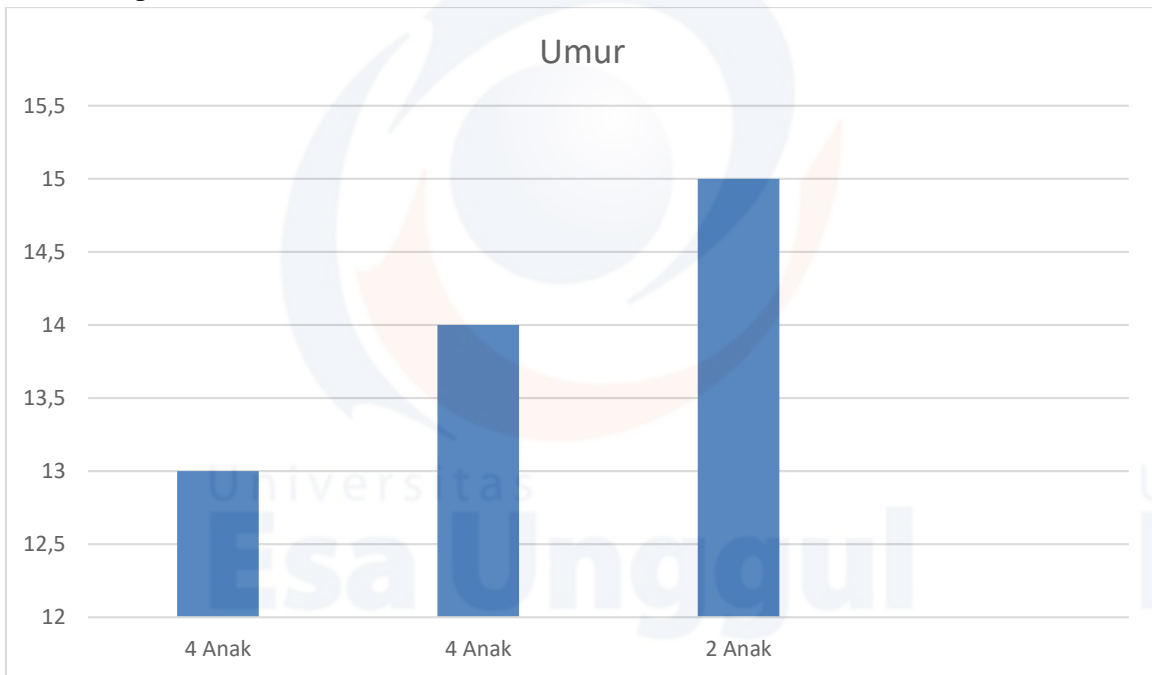
Andi 14 Tahun

Refina 14 Tahun

Kayla 15 Tahun

Ayu 15 Tahun

2. Umur Responden



Pertanyaan Untuk Pengguna

No.	Pertanyaan	SS	S	CS	TS	STS
Tampilan						
1.	Apakah tampilan aplikasi pembelajaran wayang ini menarik?					
2.	Apakah pemilihan warna pada aplikasi pembelajaran wayang ini sudah sesuai?					
3.	Apakah cerita wayang yang disajikan sudah jelas?					
4.	Apakah tulisan pada cerita wayang mudah terbaca?					
Pembelajaran						
5.	Apakah cerita wayang yang jelaskan mudah dipahami?					
6.	Apakah dengan adanya aplikasi ini lebih mudah mempelajari cerita wayang?					
7.	Apakah permainan yang disajikan sulit untuk dikerjakan?					
8.	Apakah permainan yang disediakan memotivasi untuk mempelajari cerita wayang yang lainnya?					
Engagement Loop						
9.	Saya ingin menggunakan aplikasi ini lagi untuk mempelajari cerita wayang selanjutnya					
10.	Saya ingin merekomendasikan aplikasi pembelajaran wayang ini ke teman-teman.					

Keterangan:

STS : Sangat Tidak Setuju

TS : Tidak Setuju

CS : Cukup Setuju

S : Setuju

SS : Sangat Setuju

PR : Pertanyaan Responden

P : Presentase

PR	SS	S	CS	TS	STS	P
1.	8	2				96
2.	9	1				98
3.	9	1				98
4.	3	7				86
5.	6	4				92
6.	8	1	1			94
7.	5	5				90
8.	6	3	1			90
9.	6	4				92
10.	5	5				90
				Jumlah Presentase		92,6

Lampiran 3 – Pengkodean Sistem

1. Source Code Tampilan Awal Cerita Wayang

```

1 stop();
2
3 next1.addEventListener(MouseEvent.CLICK,btn_next1);
4 function btn_next1(event:MouseEvent):void
5 {
6     SoundMixer.stopAll();
7     var suara1a: Sound = new backsong();
8     suara1a.play(0,9999);
9     nextFrame();
10 }
11
12 kembalil1.addEventListener(MouseEvent.CLICK,btn_kembalil1);
13 function btn_kembalil1(event:MouseEvent):void
14 {
15     SoundMixer.stopAll();
16     var suara1b: Sound = new intro();
17     suara1b.play(0,9999);
18     gotoAndStop(3);
19 }
20

```

```

1 stop();
2
3 next2.addEventListener(MouseEvent.CLICK,btn_next2);
4 function btn_next2(event:MouseEvent):void
5 {
6     SoundMixer.stopAll();
7     var suara2a: Sound = new backsong();
8     suara2a.play(0,9999);
9     nextFrame();
10 }
11
12 back2.addEventListener(MouseEvent.CLICK,btn_back2);
13 function btn_back2(event:MouseEvent):void
14 {
15     SoundMixer.stopAll();
16     var suara2b: Sound = new backsong();
17     suara2b.play(0,9999);
18     prevFrame();
19 }
20
21 kembali2.addEventListener(MouseEvent.CLICK,btn_kembali2);
22 function btn_kembali2(event:MouseEvent):void
23 {
24     SoundMixer.stopAll();
25     var suara2c: Sound = new intro();
26     suara2c.play(0,9999);
27     gotoAndStop(3);
28 }
29

```

2. Source code Permainan Mencocokkan Wayang

```

1 stop();
2
3 var currentStr:String = "";
4 var poinn1:Number;
5 MovieClip(root).poinn1=0;
6
7 p21.addEventListener(MouseEvent.MOUSE_DOWN, f1_p21);
8 function f1_p21(event:MouseEvent):void
9 {
10     p21.startDrag();
11     if(p21.hitTestObject(box1))
12     {
13         p21.stopDrag();
14         p21.x=144.20; // posisi x untk box1
15         p21.y=471.95;
16         poinn1=poinn1+20;
17         score1.text=String(poinn1);
18     }
19     var musikmenu1:Sound = new win();
20     musikmenu1.play(0);
21     p21.mouseEnabled=false;
22 }
23 if (poinn1 >= 100){
24     MovieClip(root).timer1.stop();
25     MovieClip(root).berhasil.visible = true;
26     MovieClip(root).waktu1.gotoAndPlay(2);
27     var musik1:Sound = new menang();
28     musik1.play(0);
29 }
30
31
32

```

```

33 else if (p21.hitTestObject(box2) || p21.hitTestObject(box3) || p21.hitTestObject(box4) || p21.hitTestObject(box5))
34 {
35     p21.stopDrag();
36     var musikmenu2:Sound = new lose();
37     musikmenu2.play(0);
38     p21.x=145.60;
39     p21.y=168.75;
40 }
41
42 p22.addEventListener(MouseEvent.MOUSE_DOWN, f1_p22);
43 function f1_p22(event:MouseEvent):void
44 {
45     p22.startDrag();
46     if(p22.hitTestObject(box2))
47     {
48         p22.stopDrag();
49         p22.x=352.55; // posisi x untk box1
50         p22.y=493.10;
51         poinn1=poinn1+20;
52         score1.text=String(poinn1);
53     }
54     var musikmenu1:Sound = new win();
55     musikmenu1.play(0);
56     p22.mouseEnabled=false;
57 }
58 if (poinn1 >= 100){
59     MovieClip(root).timer1.stop();
60     MovieClip(root).berhasil.visible = true;
61     MovieClip(root).waktu1.gotoAndPlay(2);
62     var musik1:Sound = new menang();
63     musik1.play(0);

```

5. Source Code Permainan Ya atau Tidak (Jawaban YA)

```

1  var points6:Number;
2  stop();
3
4  ya1.addEventListener(MouseEvent.CLICK,btn_ya1);
5  function btn_ya1(event:MouseEvent):void
6  {
7      var musikmenu:Sound = new win();
8      musikmenu.play(0);
9
10     benar6.visible=true;
11     MovieClip(root).benar6.gotoAndPlay(2);
12     MovieClip(root).waktu6.gotoAndPlay(2);
13     tidak1.mouseEnabled=false;
14     ya1.mouseEnabled=false;
15
16     points6=20;
17     score6.text=String(points6);
18 }
19
20 tidak1.addEventListener(MouseEvent.CLICK,btn_tidak1);
21 function btn_tidak1(event:MouseEvent):void
22 {
23     var musikmenu:Sound = new lose();
24     musikmenu.play(0);
25
26     salah6.visible=true;
27     MovieClip(root).salah6.gotoAndPlay(2);
28     MovieClip(root).waktu6.gotoAndPlay(2);
29     tidak1.mouseEnabled=false;
30     ya1.mouseEnabled=false;

```

```

16     points6=20;
17     score6.text=String(points6);
18 }
19
20 tidak1.addEventListener(MouseEvent.CLICK,btn_tidak1);
21 function btn_tidak1(event:MouseEvent):void
22 {
23     var musikmenu:Sound = new lose();
24     musikmenu.play(0);
25
26     salah6.visible=true;
27     MovieClip(root).salah6.gotoAndPlay(2);
28     MovieClip(root).waktu6.gotoAndPlay(2);
29     tidak1.mouseEnabled=false;
30     ya1.mouseEnabled=false;
31
32     points6=0
33     score6.text=String(points6);
34 }
35
36 kembali19.addEventListener(MouseEvent.CLICK,btn_kembali19);
37 function btn_kembali19(event:MouseEvent):void
38 {
39     SoundMixer.stopAll();
40     var suara19c: Sound = new intro();
41     suara19c.play(0,9999);
42     gotoAndStop(3);
43 }

```

6. Source Code Permainan Ya atau Tidak (Jawaban TIDAK)

```

1  var points7:Number;
2  stop();
3
4  ya2.addEventListener(MouseEvent.CLICK,btn_ya2);
5  function btn_ya2(event:MouseEvent):void
6  {
7      var musikmenu:Sound = new lose();
8      musikmenu.play(0);
9
10     salah7.visible=true;
11     MovieClip(root).salah7.gotoAndPlay(2);
12     MovieClip(root).waktu7.gotoAndPlay(2);
13     tidak2.mouseEnabled=false;
14     ya2.mouseEnabled=false;
15
16     points7=0
17     score7.text=String(points7);
18 }
19
20 tidak2.addEventListener(MouseEvent.CLICK,btn_tidak2);
21 function btn_tidak2(event:MouseEvent):void
22 {
23     var musikmenu:Sound = new win();
24     musikmenu.play(0);
25
26     benar7.visible=true;
27     MovieClip(root).benar7.gotoAndPlay(2);
28     MovieClip(root).waktu7.gotoAndPlay(2);
29     tidak2.mouseEnabled=false;
30     ya2.mouseEnabled=false;

```

```

16     points7=0
17     score7.text=String(points7);
18 }
19
20 tidak2.addEventListener(MouseEvent.CLICK,btn_tidak2);
21 function btn_tidak2(event:MouseEvent):void
22 {
23     var musikmenu:Sound = new win();
24     musikmenu.play(0);
25
26     benar7.visible=true;
27     MovieClip(root).benar7.gotoAndPlay(2);
28     MovieClip(root).waktu7.gotoAndPlay(2);
29     tidak2.mouseEnabled=false;
30     ya2.mouseEnabled=false;
31
32     points7=20;
33     score7.text=String(points7);
34 }
35
36 kembali20.addEventListener(MouseEvent.CLICK,btn_kembali20);
37 function btn_kembali20(event:MouseEvent):void
38 {
39     SoundMixer.stopAll();
40     var suara20c: Sound = new intro();
41     suara20c.play(0,9999);
42     gotoAndStop(3);
43 }

```

7. Source Code Permainan Memanah Wayang

```

1  package
2  {
3      import flash.display.MovieClip;
4      import flash.events.Event;
5      import flash.events.MouseEvent;
6      import flash.events.TimerEvent;
7      import flash.filters.BlurFilter;
8      import flash.utils.Timer;
9
10     public class Main extends MovieClip
11     {
12         private var _score:Number = 20;
13         private var _gravity:Number = .6;
14
15         // gun settings
16         private var _bulletSpeed:Number = 12;
17         private var _bulletLength:Number = 750;
18         private var _reloadSpeed:Number = 250; //milliseconds
19         private var _bulletLength:Number = 20;
20         private var _bulletSpeed:Number = 3;
21
22         // gun stuff - do not edit
23         private var _isLoading:Boolean = true;
24         private var _isFiring:Boolean = false;
25         private var _endY:Number;
26         private var _startY:Number;
27         private var _startY:Number;
28         private var _reloadTimer:Timer;
29         private var _bulletArray = [];
30
31         // array that holds walls
32         private var _solidObjects:Array = [];
33
34         // global vars

```

```

35     // global vars
36     private var _player:MovieClip;
37     private var _dx:Number;
38     private var _dy:Number;
39     private var _guy:Number;
40     private var _gunY:Number;
41     private var _gunX:Number;
42     private var _tweeRotation:Number;
43     private var _ywall3:Number=10;
44     private var _xwall3:Number=0;
45     private var _scoreMax:Number=10;
46
47     /**
48      * Constructor
49      */
50     public function Main()
51     {
52         createPlayer();
53
54         stage.addEventListener(Event.ENTER_FRAME, enterFrameHandler);
55         stage.addEventListener(MouseEvent.CLICK_DOWN, clickDownHandler);
56         stage.addEventListener(MouseEvent.CLICK_UP, clickUpHandler);
57
58         //Tjajah, tulis yang baik
59         _solidObjects = [wall10, wall20, wall30, wall40, wall50, wall60, wall70, wall80, wall90, wall100];
60
61         private function createPlayer():void {
62             _player = new Player();
63             _player.x = stage.stageWidth / 2;
64             _player.y = stage.stageHeight - 100;

```

```

66  _player.y = stage.stageHeight - 100;
67  stage.addChild(_player);
68
69  // fire
70  private function fire():void {
71  if (!_isFiring) return;
72  if (!_isLoading) return;
73  createBullet();
74
75  _reloadTimer = new Timer(_reloadSpeed);
76  _reloadTimer.addEventListener(TimerEvent.TIMER, reloadTimerHandler);
77  _reloadTimer.start();
78
79  _isLoading = false;
80
81  private function createBullet():void {
82  _posX = Math.cos(_player.rotation * Math.PI / 180);
83  _posY = Math.sin(_player.rotation * Math.PI / 180);
84
85  _startX = _player.x - _barrelLength * _posX;
86  _startY = _player.y - _barrelLength * _posY;
87
88  _endX = _player.x + 50 * _posX + Math.random() * _bulletSpeed - _bulletSpeed * .5;
89  _endY = _player.y + 50 * _posY + Math.random() * _bulletSpeed - _bulletSpeed * .5;
90
91  var tempBullet:MovieClip = new Bullet();
92
93  // calculate velocity
94  tempBullet.vx = (_endX - _startX) / _bulletSpeed;
95  tempBullet.vy = (_endY - _startY) / _bulletSpeed;
96

```

```

103 // set position
104 tempBullet.x = _startX;
105 tempBullet.y = _startY;
106
107 // set starting location
108 tempBullet.startX = _startX;
109 tempBullet.startY = _startY;
110
111 // set maximum allowed travel distance
112 tempBullet.maxDistance = _maxDistance;
113
114 // add bullet to bullets array
115 _bullets.push(tempBullet);
116
117 // add no display list
118 stage.addChild(tempBullet);
119
120
121 private function updateBullet():void {
122
123 var i:int;
124 var tempBullet:MovieClip;
125
126 // loop thru bullets array
127 for (i = 0; i < _bullets.length; i++) {
128 // save a reference to current bullet
129 tempBullet = _bullets[i];
130
131 // check if gravity is enabled
132 if (gravityCheckBox.selected) {
133 // add gravity to y velocity
134 tempBullet.vy += _gravity;
135

```

```

136 // add gravity to y velocity
137 tempBullet.vy += _gravity;
138
139 // update bullet position
140 tempBullet.x += tempBullet.vx;
141 tempBullet.y += tempBullet.vy;
142
143 if (getDistance(tempBullet.startX - tempBullet.x, tempBullet.startY - tempBullet.y) > tempBullet.maxDistance) {
144 destroyBullet(tempBullet);
145 }
146
147 if (checkCollisions(tempBullet.x, tempBullet.y)) {
148 destroyBullet(tempBullet);
149 }
150
151 }
152
153 }
154
155 private function destroyBullet(bullet:MovieClip):void {
156 var i:int;
157 var tempBullet:MovieClip;
158
159 for (i = 0; i < _bullets.length; i++) {
160 tempBullet = _bullets[i];
161 if (tempBullet == bullet) {
162 _bullets.splice(i, 1);
163
164 bullet.parent.removeChild(bullet);
165

```

```

170 bullet.parent.removeChild(bullet);
171
172 return;
173 }
174 }
175
176 private function reloadWeapon():void {
177 _isLoading = true;
178
179 }
180
181 private function checkCollisions(testX:Number, testY:Number):Boolean {
182 var i:int;
183 var tempWall:MovieClip;
184
185 for (i = 0; i < _wallObjects.length; i++) {
186 tempWall = _wallObjects[i];
187
188 if (tempWall.hitTestPoint(testX, testY, true)) {
189 trace("Hit!" + tempWall);
190
191 // handle collision
192 handleCollision(tempWall);
193
194 if (i < _wallObjects.length - 1) {
195 trace("Hit!" + tempWall);
196 }
197
198 // next frame
199 stage.removeChild(_player);
200
201 trace("Hit!" + tempWall);
202 }
203 }
204

```

```

205 // hit!
206 myWall = myWall + 1;
207 // trace(myWall);
208 trace("Hit!" + tempWall);
209 // handle collision
210 handleCollision(tempWall);
211 if (i < _wallObjects.length - 1) {
212 trace("Hit!" + tempWall);
213 }
214
215 stage.removeChild(_player);
216
217 trace("Hit!" + tempWall);
218 }
219
220 return true;
221 }
222
223 break;
224 }
225
226 return false;
227 }
228
229 private function updateRotation():void {
230 _rot = _player.x - stage.mouseX;
231 _rotY = _player.y - stage.mouseY;
232
233 var rotateTo:Number = getDegrees(getRadians(_rot, _rotY));
234
235 if (rotateTo > _player.rotation + 180) rotateTo -= 360;
236 if (rotateTo < _player.rotation - 180) rotateTo += 360;
237
238 _rotation = (_rotation - player.rotation) / _rotateSpeed;
239

```

```

240 // rotation = (rotateTo - player.rotation) / _rotateSpeed;
241
242 _player.rotation += _trueRotation;
243
244 }
245
246 private function enterFrameHandler(event:Event):void {
247 updateRotation();
248 updateBullets();
249 fire();
250
251 }
252
253 private function onMouseEventHandler(event:MouseEvent):void {
254 _isFiring = false;
255
256 }
257
258 private function onMouseEventHandler(event:MouseEvent):void {
259 _isFiring = true;
260
261 }
262
263 private function reloadTimerHandler(e:TimerEvent):void {
264 _isLoading = null;
265 reloadWeapon();
266 }
267
268 public function getDistance(deltaX:Number, deltaY:Number):Number {
269 return Math.sqrt((deltaX * deltaX) + (deltaY * deltaY));
270 }
271
272 public function getRadians(deltaX:Number, deltaY:Number):Number {
273 var r:Number = Math.atan2(deltaY, deltaX);
274
275 if (deltaY < 0) {
276 r += Math.PI;
277 }
278
279 return r;
280 }
281
282 public function getDegrees(radians:Number):Number {
283 return Math.floor(radians / Math.PI * 180);
284 }
285
286 }
287

```

```

288 _isFiring = false;
289 }
290
291 private function onMouseDownHandler(event:MouseEvent):void {
292 _isFiring = true;
293 }
294
295 private function reloadTimerHandler(e:TimerEvent):void {
296 _isLoading = null;
297 reloadWeapon();
298 }
299
300 public function getDistance(deltaX:Number, deltaY:Number):Number {
301 return Math.sqrt((deltaX * deltaX) + (deltaY * deltaY));
302 }
303
304 public function getRadians(deltaX:Number, deltaY:Number):Number {
305 var r:Number = Math.atan2(deltaY, deltaX);
306
307 if (deltaY < 0) {
308 r += Math.PI;
309 }
310
311 return r;
312 }
313
314 public function getDegrees(radians:Number):Number {
315 return Math.floor(radians / Math.PI * 180);
316 }
317

```