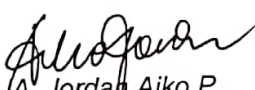
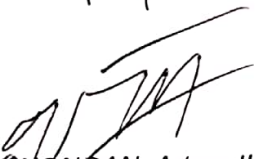
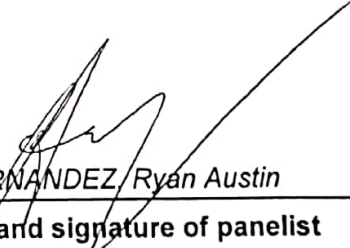
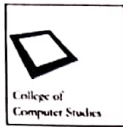


RESEARCH ETHICS CLEARANCE FORM For Thesis Proposals <sup>1</sup>	
<b>Names of student researcher/s :</b>	ATO, Paolo Miguel B. GAMUTAN, Mart Henrick A. SALCEDO, Antoine Mikhael M. VALENCIA, Josh Cezar L.
<b>College:</b>	College of Computer Studies
<b>Department:</b>	Software Technology Department
<b>Research Title:</b>	FireflyX: Designing Interactions for a Mobile Musical Learning Tool for Children
<b>Course:</b>	BS Computer Science with specialization in Software Technology
<b>Expected duration of project:</b>	from: May 2019 to: August 2020
<b>Ethical considerations</b> <i>Access to the school will be requested from the school administration</i> <i>Parental consent form will be given to parents to receive permission to request participation from their children for observation and testing.</i> <i>Children will be observed</i> <i>Music Teacher will be interviewed</i> <i>Music Expert will be interviewed</i> <i>Music teacher will be asked to assess the usability of the prototype</i> <i>Music teacher will be asked to assess the usability of the final app</i>	
<p>To the best of our knowledge, the ethical issues listed above have been addressed in the research.</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="width: 45%;">   DEJA, Jordan Aiko P.  <hr/> <b>Name and signature of adviser/mentor</b>  Date: 11/06/2019 </div> <div style="width: 45%;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">   CARONONGAN, Arturo III  <hr/> <b>Name and signature of panelist</b>  Date: 12/16/19 </div> <div style="width: 45%;">   FERNANDEZ, Ryan Austin  <hr/> <b>Name and signature of panelist</b>  Date: </div> </div> </div> </div>	

<sup>1</sup>The same form can be used for the reports of completed projects. The appropriate heading need only be used.



SOFTWARE TECHNOLOGY DEPARTMENT  
COLLEGE OF COMPUTER STUDIES  
DE LA SALLE UNIVERSITY

**THSST-2 AGREEMENT FORM**

**NOTES:**

1. This form will serve as an agreement between the Thesis Panel Committee, Thesis Adviser and Thesis Group.
2. Once the form is signed by all the parties concerned, items listed are assumed final and irrevocable.
3. Please return this form to the Thesis Coordinator on or before \_\_\_\_\_.

THESIS TITLE:	FireFlyX: Designing Interactions for a Mobile Musical Learning Tool for Children	
PROPOSERS:	Paolo Miguel B. Ato	Mart Henrick A. Gamutan
	Antoine Mikhael M. Salcedo	Josh Cezar L. Valencia
ADVISER:	Jordan Aiko P. Deja	
PANELISTS:	Ryan Austin Fernandez	Arturo Caronongan III

THE ABOVE-MENTIONED THESIS GROUP IS EXPECTED TO COMPLY THE FOLLOWING ON OR BEFORE THE DUE DATE STATED BELOW AS AGREED UPON WITH THE THESIS PANEL COMMITTEE & THESIS ADVISER:

4.0 - 80 percent prototype with 7 testers
3.0 - 80 percent prototype
2.0 - 60 percent prototype with 3 testers
1.0 - 60 percent prototype

**GRADING SCHEME:**

The panel members reserve the right to provide variances in grading based on their evaluation of the quality of the actual output. The paper is a mandatory requirement.

4.0 – We will be testing the 80% functionality with at least 7 children, the aim is to get a better understanding of their human factors. Timeline (Mar13-Mar29).

3.0 – For the 80% completeness, new features like pitch and release to canvas will be added. In addition to these we will improve functionality found in iteration1. Timeline (Feb20-Mar13).

2.0 – We will be testing the 60% functionality with at least 3 children, with the objective of gathering initial insights on the application. Timeline (Feb13-Feb20).

1.0 – For the 60% completeness functionalities namely the tail (pattern), wing (repetition), body (tempo), wing (note speed), and the playback engine will be completed along with the interface. of the application. The user can only do one firefly model at this point. Timeline (Jan13-Feb13).

Present a paper at the ST Research Congress/Symposium.

See appendix for breakdown

TO BE CHECKED BY:


☐ Adviser

☐ All Panel Members

☐ All Panel Members & Adviser

**Conforme:**

THESIS PROPONENTS:

  
Paolo Miguel B. Ato


*printed name and signature*

  
Antoine Mikhael M. Salcedo

*Printed Name and Signature*

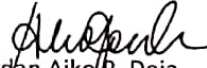
  
Mart Henrick A. Gamutan

*Printed Name and Signature*

  
Josh Cesar L. Valencia

*Printed Name and Signature*

ADVISER:

  
Jordan Aiko P. Deja

*Printed Name and Signature*

PANEL COMMITTEE:

  
Jordan Aiko P. Deja

*Printed Name and Signature*

  
Ryan Austin Fernandez

*Printed Name and Signature*

  
Arturo Caronongan III

*Printed Name and Signature*

## THSS-2 Agreement Form Appendix

### Breakdown of features

#### 60% prototype include:

One firefly mode  
Configurable Parts  
-Tail  
-Wing(Note Speed)  
-Body  
-Wing(Repetition)  
Not Included  
-Canvas  
-Jar  
-Playback  
-Biscuit(Pitch)  
-Five firefly models  
-Load  
-Save  
-Reset

#### 80% prototype include:

One firefly mode  
Configurable Parts  
-Tail  
-Wing(Note Speed)  
-Body  
-Wing(Repetition)  
-Biscuit(Pitch)  
-Canvas(Staff)  
Not Included  
-Jar  
-Playback  
-Five firefly models  
-Load  
-Save  
-Reset

100% prototype includes all the features listed above.

### Conforme:

#### THESIS PROPONENTS:



Paolo Miguel B. Ato

*printed name and signature*



Antoine Mikhael M. Salcedo

*Printed Name and Signature*



Mart Henrick A. Gamutan

*Printed Name and Signature*



Josh Cezar L. Valencia

*Printed Name and Signature*

#### ADVISER:



Jordan Aiko P. Deja

*Printed Name and Signature*



Jordan Aiko P. Deja

*Printed Name and Signature*

#### PANEL COMMITTEE:



Ryan Austin Fernandez

*Printed Name and Signature*



Arturo Caronongan III

*Printed Name and Signature*





**COLLEGE OF COMPUTER STUDIES  
SOFTWARE TECHNOLOGY DEPARTMENT**

**REVISIONS APPROVAL SHEET**

<b>Term 1 AY 2019 - 2020</b>	<b>Proponents:</b>	
<b>THS-CS1 Thesis Title:</b>	Paolo Miguel Ato Mart Henrick Gamutan Antoine Mikhael Salcedo Josh Cezar Valencia	
FireflyX: Designing Interactions for a Mobile Musical Learning Tool for Children	<b>Date/Time Defended</b>	<b>Date/Time Submitted</b>
	11/14/2019 4:30pm-5:30pm	

<b>Adviser</b>	<input checked="" type="checkbox"/> for acceptance	<b>Accepted/Approved</b>		
	<input type="checkbox"/> for approval	Signature	Date	Remarks
Jordan Aiko Deja			11/30/2019	Endorsed
<b>Panel Members</b>	<b>Checked</b>		<b>Approved</b>	
	Signature	Date/Time	Signature	Date/Time
Ryan Austin Fernandez		12/10/19 / 5:46 PM		12/10/19 / 5:46 PM
Arturo Caronongan		12/11/19		12/16/19

**Recommendation of Lead Panel:** Revise and recheck by ALL panel members

Revisions (use the back page if necessary)	Page # on the revised document
Retained Title	i
Reworded Specific Objective 1	4
Revised Specific Objective 3	5
Included Time Signature in scope and limitations	5
Included Dotted Notations in scope and limitations	5
Included Tempo in scope and limitations	5
Replaced beats as claps	5+

Made terms consistent(FireflyX, firefly models)	5+
Change "it self" to "itself"	10
Removed is, fixed capitalization, changed "childrens" to "children's"	21
Removed the extra "table" word then capitalized "table"	22
Capitalized the word "figure", changed firefly to FireflyX	23
Changed "interface development " to lowercase	26
Added categories	27
Added necessary punctuation marks, removed parenthesis when referring to tables, removed unnecessary quotation marks, case italicized "Contrast", "Repetition", "Alignment", and "Proximity"	28
Changed "6" to "six"	31
Changed "5" to "five"	33
Changed "3" to "three"	34
Changed "4" to "there are four" Changed "4" to "four" Changed "two" to "2" and "seven" to "7"	35
Changed "seven" to "7" and "eleven" to "11" "TO" to "To" "2" to "two"	36
Changed "5" to "five"	37
Added a description of Seymore's idea	39
Changed User Experience Evaluation to User Experience Design & Evaluation	41
Changed "the researchers" to "we" "7" to seven "9" to "nine"	42
Changed "5" to "five"	45
Included Pitch in Chapter 3.4.2	46-47
Included Tempo in Chapter 3.4.2	47

Changed "2" to "two"	48
Changed "Consulation" to "consultation"	53
Included Usability Testing Protocol	55-61
Changed "1" to "one"	56
Included Experiment Setup	56
Changed "5" to "five"	59
FireflyX: Added biscuits to represent pitch	64
Included low level system with classes and relationships	66
Removed Unnecessary parentheses	66
Revised Chapter 5.5 to match new Mockup	66-68
FireflyX: Added colors to represent tempo	67
Included Design Protocols	73
Revised and replaced all figures in Chapter 5.8 to match new Mockup	75-87
Capitalized Swift and Apple App Store	88
Fixed Use Case 9 Borders	124

- This serves as the cover page of the revised document. Items listed should coincide with those listed in the defense evaluation sheet.
- Adviser **must** approve the revisions before its presentation to the panel. Otherwise panel members **must not** accept then revisions unless otherwise indicated in the revision sheet.
- Panel members sign either in the checked column indicating it has been checked or the approved indicating final approval.
- The lead panel is the last to sign and give the final recommendation
- Proponent must take note of requirements and deadlines set by the Department through the Thesis Coordinator.