



# STATEMENT OF WORK

SENSIBLE APPLICATION DEVELOPMENT

AUSTRALIAN NATIONAL UNIVERSITY | PROFESSOR HANNA SUOMINEN

# 1. Statement of Work brief details

**Statement of Work number:** 002

**This Statement of Work expires if not executed by both parties on:** 29 October 2021

## 2. General

The Statement of Work lists the services and activities required by Professor Hanna Suominen (the Client) from the Australian National University (the Supplier) under the 'TechLauncher' subject course.

## 3. Organisation

PROJECT NAME	Sensible
CLIENT	Professor Hanna Suominen
SOW VERSION NUMBER	2.0
CLIENT EMAIL	hanna.suominen@anu.edu.au
MAILING ADDRESS	Australian National University, Canberra, ACT, 0200
DATE PREPARED	01/08/2021
AUTHOR:	Madeleine Carden
PROJECT MANAGER	Ryan Turner
BEGIN DATE	02/08/2021
END DATE	29/10/2021
PROJECT DURATION	3 months

## 4. Project Team

NAME / TITLE	CONTACT INFORMATION
IAN OXBORROW	U6668026@ANU.EDU.AU
MADELEINE CARDEN	U5849803@ANU.EDU.AU
MICHAEL CHEUNG	U6181123@ANU.EDU.AU
RYAN TURNER	U6040885@ANU.EDU.AU
CHATHURA GALAPPATHTHI	U6947345@ANU.EDU.AU
TRISTAN SMITH	U6949592@ANU.EDU.AU

## 5. Project

Students will be required to continue building the Sensible application which is a cross system phone application for iOS and Android devices. The project will include liaising with potential users of the system to ensure the application will be successful upon release.

Sensible is an application which takes data from sensors already built into phones, both outputting the data in real time and storing the data for later use. It gives user a great UI which they can use to label data from any sensor on their phone in real time as the data is being recorded. It differs from current applications as it allows capturing, annotating and exporting information from all sensors on a device in one place.

## 6. Background

Current applications available allow data capturing from a limited number of sensors on a phone, but don't include the ability to capture data from any of the sensors and visualise (where applicable) or label the data in real time. These applications are also not suitable for people with all abilities, including the elderly and those with diseases which can cause chronic pain.

The aim for this project is to create a free application which can be used by anyone, especially students and research participants, to generate labelled data for research purposes, and to collect and send this data entirely from their mobile devices.

## 7. Resource Requirements

A team of ANU (Australian National University) students to design, build, execute and produce a product for primary use by Professor Hanna Suominen, her team of researchers and their research participants.

## 8. Project Schedule (high level)

PROJECT	HOURS	Purpose
Plan	30	Obtain ethical clearance and liaise with potential users to create a user friendly product.
Build	60	Update and add to operational capability based on feedback from user testing.
Execute	30	Executing code to run and push to app store.
<b>FEE SCHEDULE</b>		
None. Students work on the project as part of their course code requirements		

## 9. Scope of Work

Students will continue to work on the Sensible application by including aspects of the application which make it user friendly, based on user feedback from potential users, and add functionality to receive data from additional sensors. The additional sensors to consider including (where available) are: camera, Wi-Fi signal strength, temperature, humidity, ambient light and proximity sensors. Additional sensors may be added to this list after a thorough search has been conducted.

## 10. Project Deliverables

1. Obtain ethical clearance for testing the application.
2. Conduct preliminary user testing.
3. Use outcomes of preliminary user testing to modify application, making it more accessible and user friendly.
4. Complete the user interface of the app and end to end functionality (including the mentioned sensors) with the potential of further improvements for future iterations.
5. Integrate the secondary set of sensors identified for this semester.
6. Successfully deliver the application for both iOS and Android devices.
7. Create detailed project documentation for handover to another development team.

## 11. Milestones

EST DELIVERY DATE	PROJECT MILESTONE TITLE
09/08/2021	Creation of SOW, first group meeting to discuss hand over of iOS and android versions of the application for client testing. User story map and burndown chart to be created. Creation of team video for ANU science week presentation. (Outputs: SOW, Android APK and iOS ipa, USM, burndown chart, team video) Audit Landing Links Due (Wk2), PA1 Tag Reports Due (Wk3), PA1 Team Contributions Due (Wk3)
16/08/2021	Apply for ethical clearance and undertake training to meet with potential user groups to test the application. Decide on the sensors which will be integrated into the application this semester.  PA1 Feedback Released (Wk4), WPP Workshop 1 (Wk4)
23/08/2021	Coding to continue. Client and student interactions to be ongoing through constant communication, meet ups, testing and revising. User tests to be created for preliminary user testing.
30/08/2021	Team to begin meeting with users and undertake user testing. Client and student interactions to be ongoing through constant communication, meet ups, testing and revising. Two additional sensors are to be integrated into the application and delivered to the client. AUDIT WEEK OPENS (Wk6), PA2 Tag Reports Due (Wk6), PA2 Team Contributions Due (Wk6),

6-19/09/2021	<b>Mid Term Break</b> (to ensure their level of work is maintained during this period). Students to review the SOW and provide feedback at session with client. PA2 Feedback Released (Bk1)
27/09/2021	Based on preliminary user testing, students are to modify application to make it more accessible and user friendly. Completion of end to end application user interface functionality. Begin creation of documentation for application in preparation for handover to client at the end of the semester. This documentation should allow for the application to be maintained and extended by another development team in the future. WPP Workshop 2 (Wk 7), WPP Workshop 3 (Wk 8)
04/10/2021	Testing and polishing application. Students are to reflect on the user testing undertaken and make plans for future testing which would be useful to undertake. End of project showcase video to be created and provided to client as promotional content for application. Project Showcase Video Due (Wk9), AUDIT WEEK OPENS (Wk10), PA3 Tag Reports Due (Wk10), PA3 Team Contributions Due (Wk10)
19/05/2021	Finalisation of all development platforms, coding to be saved and handover of tasks, testing outcomes and recommendations for the future of the application to be handed to the client. PA3 Feedback Released (Wk11), WPP Workshop 4 (Wk11)
26/05/2021	Final group review and feedback session with client and students. Work Portfolio Package Due (Wk12), Showcase (Wk12)

## 12. Deliverable Materials

Those set out within the Milestones as well as a functioning application for both iOS and Android devices. The app must include functionality of visual, audio and accelerometer sensors. Preliminary user testing must have been completed with outcomes provided and changes to the application made where necessary, based on this testing.

## 13. Stakeholders

<b>PRIMARY PROJECT OWNER</b>	PROFESSOR HANNA SUOMINEN
<b>OTHER PROJECT OWNERS/USERS</b>	CHIRATH HETTIARACHCHI, SANDARU SENEVIRATNE, ROBIN VLIEGER, DR ELENI DASKALAKI
<b>PROJECT TEAM</b>	IAN OXBORROW, MADELEINE CARDEN, MICHAEL CHEUNG, RYAN TURNER, TRISTAN SMITH, CHATHURA GALAPPATHTHI

<b>EXAMINER</b>	ANDREA PARSONS
<b>TUTOR</b>	RICHARD LUCAS

## 14. Operations and Support

**Communications Plan (Found on team's landing page)**

### **Regulatory Compliance**

Regulatory compliance to be maintained and adhered to during the project.

## 15. Responsibilities – Services Coordination

### **Team responsibilities**

As set out in the team charter (found on the team's landing page).

### **Confidentiality**

Project will be open source under the following licence <https://opensource.org/licenses/MIT>.

### **Termination**

SOW will terminate at end of specified time period.



## 16. Project Risks and Mitigation

ISSUE / RISK	MITIGATION / CONTINGENCY
Project team does not allow sufficient time to manage the additional expectations of the client	<p>Mitigation: Stick to burndown chart and ensure team are on schedule as this was successful in semester 1.</p> <p>Contingency: Reduce the number of sensors supported by the app to ensure it can be delivered by the end of semester.</p>
Project timelines and deliverables are not feasible within the timeframe given	<p>Mitigation: Create a user story map for discussion with client in first month of project to ensure deliverables are feasible.</p> <p>Contingency: Keep open communication with the client to notify as early as possible about progress on project and extend project duration if needed.</p>
Project scope creep means that the deliverables are not what is agreed upon	<p>Mitigation: Set clear scope in first month of project, signed off by all parties.</p> <p>Contingency: Fall back on documentation providing scope to prove agreed functionality to client.</p>

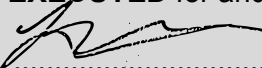
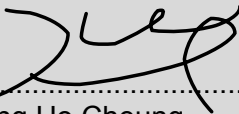
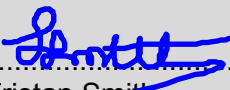
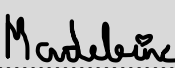
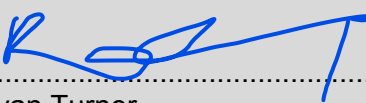

Ethical clearance takes longer than a semester to be granted	<p>Mitigation: Hanna and her team have a good relationship with the team who grants ethical clearances and the Sensible team will use their help and knowledge to apply for the permit.</p> <p>Contingency: If the permit takes too long to be granted, renegotiate the scope of the SOW to include testing which doesn't involve humans as participants for the preliminary tests.</p>
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## Execution of Statement of Work

### Execution by Client

Date 9 Aug 2021	
<p><b>EXECUTED</b> for and on behalf of:</p> <p></p> <p>.....</p> <p>Associate Professor Hanna Suominen</p>	<p>In the presence of:</p> <p></p> <p>.....</p> <p>Signature of witness</p> <p>Robin Vlieger .....</p> <p>Name of witness (block letters)</p>

### Execution by Students

Date <u>10/08/21</u>	
<p><b>EXECUTED</b> for and on behalf of:</p> <p></p> <p>.....</p> <p>Ian Oxborrow</p> <p></p> <p>.....</p> <p>King Ho Cheung</p> <p></p> <p>.....</p> <p>Tristan Smith</p>	<p></p> <p>.....</p> <p>Madeleine Carden</p> <p></p> <p>.....</p> <p>Ryan Turner</p> <p></p> <p>.....</p> <p>Chathura Galappaththi</p>