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| Statement of Work |
| Sensible application developmenT |
| AUSTRALIAN NATIONAL UNIVERSITY | PROFESSOR HANNA SUOMINEN |

# 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

# 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.

# Organisation

PROJECT NAME Sensible

CLIENT Professor Hanna Suominen

SOW VERSION NUMBER 2.1

CLIENT EMAIL hanna.suominen@anu.edu.au

MAILING ADDRESS Australian National University, Canberra, ACT, 0200

DATE PREPARED 25/08/2021

AUTHOR: Madeleine Carden

PROJECT MANAGER Ryan Turner

BEGIN DATE 02/08/2021

END DATE 29/10/2021

PROJECT DURATION 3 months

# Project Team

NAME / TITLE CONTACT INFORMATION

IAN OXBORROW U6668026@ANU.EDU.AU

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# 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.

# 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 will 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.

# 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.

# Project Schedule (high level)

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| **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. |
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| **FEE SCHEDULE** |  |  |
| None. Students work on the project as part of their course code requirements | | |
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# 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 implement are GPS and magnometer as decided by the project and client team. These sensors will be the most useful to users and can be successfully implemented in the given time.

# Project Deliverables

1. Obtain ethical clearance for testing the application.
2. Conduct preliminary user testing on non-vulnerable users.
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.

# Milestones

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| **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 chat 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 sourcing potential users and begin to 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 | **Mid Term Break** (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) |

# 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.

# Stakeholders

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| **PRIMARY PROJECT OWNER** | PROFESSOR HANNA SUOMINEN |
| **OTHER PROJECT OWNERS/USERS** | CHIRATH HETTIARACHCHI, SANDARU SENEVIRATNE, ROBIN VLIEGER, DR ELENI DASKALAKI |
| **PROJECT TEAM** | IAN OXBORROW, MADELEINE CARDEN, MICHAEL CHEUNG, RYAN TURNER, TRISTAN SMITH, CHATHURA GALAPPATHTHI |
| **EXAMINER** | ANDREA PARSONS |
| **TUTOR** | RICHARD LUCAS |
| **USER TESTERS** | MEMBERS OF THE ANU TECHLAUNCHER COHORT |

# Operations and Support

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

**Regulatory Compliance**

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

# 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.

# Project Risks and Mitigation

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

# Execution of Statement of Work

**Execution by Client**

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| |  |  |  | | --- | --- | --- | | Date 9 Aug 2021  **EXECUTED** for and on behalf of:    Associate Professor Hanna Suominen | |  |  |  |  |  |  |  |  | | In the presence of:    Signature of witness    Name of witness (block letters) | |

**Execution by Students**

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| Date  **EXECUTED** for and on behalf of:    Ian Oxborrow    King Ho Cheung    Tristan Smith | Madeleine Carden    Ryan Turner    Chathura Galappaththi |