



STATEMENT OF WORK

SENSIBLE APPLICATION DEVELOPMENT

AUSTRALIAN NATIONAL UNIVERSITY | DR ELENI DASKALAKI

1. Statement of Work brief details

Statement of Work number: 001

This Statement of Work expires if not executed by both parties on: 31 March 2021

2. General

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

3. Organisation

| | |
|--------------------|-----------------------------------------------------|
| PROJECT NAME | Sensible |
| CLIENT | Dr Eleni Daskalaki |
| SOW VERSION NUMBER | 0.0.2 |
| CLIENT EMAIL | eleni.daskalaki@anu.edu.au |
| MAILING ADDRESS | Australian National University, Canberra, ACT, 0200 |
| DATE PREPARED | 04/03/2020 |
| AUTHOR: | Madeleine Carden and Tristan Smith |
| PROJECT MANAGER | Ryan Turner |
| BEGIN DATE | 01/03/2020 |
| END DATE | 01/06/2020 |
| 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 build a cross system phone application for iOS and Android devices and a back end system for the application called Sensible.

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.

The aim for this project is to create a free application which can be used by students 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 minimum viable product for the presentation to clients and potential future users.

8. Project Schedule (high level)

| PROJECT | HOURS | Purpose |
|------------------------------------------------------------------------------|-------|---------------------------------------------|
| Plan | 30 | Design the platform both front and back end |
| Build | 60 | Developing operational capability |
| Execute | 30 | Executing code to run and push to app store |
| | | |
| FEE SCHEDULE | | |
| None. Students work on the project as part of their course code requirements | | |

9. Scope of Work

Students will produce an application which is able to receive data (where available) from the following sensors: camera, microphone, accelerometer, GPS, Wi-Fi signal strength, barometer, temperature, magnetometer, humidity, gyroscope, ambient light and proximity sensors. Additional sensors may be added to this list after a thorough search has been conducted to compile a list of smartphone available sensors.

10. Project Deliverables

1. Market analysis of products to ensure no products with the same functionalities exist
2. Design a minimum viable product (including some of the mentioned sensors) with the potential of further improvements for future iterations
3. Implement real time visualisations of data collected from sensors
4. First platform design, execution and feedback processes (Gitlab issues board, SCRUM)
5. Second platform design, execution and feedback processes (and so on until a working minimum viable product is created)
6. Stakeholder presentations (internal)

11. Milestones

| EST DELIVERY DATE | PROJECT MILESTONE TITLE |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10/03/2021 | Creation of SOW, first group meeting to discuss how and who will be gathering the business and technical requirements (outputs: Task list, SOW and IP documentation) PA1 Tag Reports Due (Wk3), PA1 Team Contributions Due (Wk3) |
| 17/03/2021 | Making decisions about the tooling and design for this phase of the project according to the gathered requirements. Review and revise. Market analysis for products to build the platform PA1 Feedback Released (Wk4), WPP Workshop 1 (Wk4) |
| 24/03/2021 | Coding and platform software engineering build to commence. Client and student interactions to be ongoing through constant communication, meet ups, links to build, testing and revising. |
| 31/03/2021 | Coding and platform software engineering build to continue. Client and student interactions to be ongoing through constant communication, meet ups, links to build, testing and revising. User engagement plans to commence being designed and implemented. AUDIT WEEK OPENS (Wk6), PA2 Tag Reports Due (Wk6), PA2 Team Contributions Due (Wk6), |

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|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-19/04/2021 | Easter/Mid Term Break (depending on development, students 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) |
| 28/04/2021 | Execution of development so far for both front and back ends presented to client. Implementation of further sensors and possible expansion of cloud storage exportation options. WPP Workshop 2 (Wk 8), Project Showcase Video Due (Wk9) |
| 12/05/2021 | Testing and polishing mature stage application prototype. 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, review of both client and students of the project. Phase two outputs to be discussed. PA3 Feedback Released (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 (at minimum) a functioning front user interface for both iOS and Android, with a functioning backend platform to support it. The app must include functionality of visual, audio and accelerometer sensors. Further details to be renegotiated on the 31st of March.

13. Stakeholders

| | |
|-----------------------------------|---------------------------------------------------------------------------------------------------|
| PRIMARY PROJECT OWNER | DR ELENi DASKALAKI |
| OTHER PROJECT OWNERS/USERS | CHIRATH HETTIARACHCHI, SANDARU SENEVIRATNE, ROBIN VLIEGER, PROF HANNA SUOMINEN |
| PROJECT TEAM | IAN OXBORROW, MADELEINE CARDEN, MICHAEL CHEUNG, RYAN TURNER, TRISTAN SMITH, CHATHURA GALAPPATHTHI |
| EXAMINER | PRISCILLA KAN JOHN |
| TUTOR | ANDREA PARSONS |

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

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 or once an MVP has been delivered

16. Project Risks and Mitigation

| ISSUE / RISK | MITIGATION / CONTINGENCY |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project team does not allow sufficient time to manage the expectations of the client | <p>Mitigation: Stick to burndown chart and ensure team are on schedule</p> <p>Contingency: Reduce functionality of MVP 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 storyboard 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 to 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> |
| Cost for the development platform is not free | <p>Mitigation: Requirements to be identified in the first month of the project to allow time for needed actions/decisions</p> <p>Contingency: Cost will be investigated and assessed. The matter will then be discussed with the client to decide whether to include that aspect of the project or not.</p> |

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|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sensor Interfaces not open for accessing/recording or special permissions required by the OS companies (Apple, Google) | Sensor accessibility requirements to be identified in the first month of the project to allow time for needed actions/decisions. If permissions are needed for certain sensors, the process, time and cost will be investigated and assessed. The matter will then be discussed with the client to decide whether to include those sensors or not. |
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Execution of Statement of Work

Execution by Client

| | |
|---------------------------------------|---------------------------------|
| Date | |
| EXECUTED for and on behalf of: | In the presence of: |
| | |
| Dr Eleni Daskalaki | Signature of witness |
| | |
| | Name of witness (block letters) |

Execution by Students

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