**Schedule A**

Use this document to provide relevant project details about your organization and your project and send it back to the faculty Capstone Projects Coordinator (email provided at the end of this document).  
Please use simple text formatting as the data within this document is exported into our Projects database and formatting is lost during the export process. **NOTE: One Project per Form please**

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| **1** | **Client/Organisation Name:** | Festiiv Pty Ltd |
| **2** | **Organisation Description:  *Brief description of your business*** | FESTIIV designs and manages cooperative programs for the development and commercialization of cutting edge, Australian science and technology. |
| **3** | **Address:** | 19 Montgomery Street  Richmond, VIC 3121 |
| **4** | **Website:** | www.festiiv.com |
| **5** | **Direct Contact:** | Dr. Peter Mountford |
| **6** | **Contact Title:** | Director |
| **7** | **Telephone:** | 0400242355 |
| **8** | **Email:** | peter@festiiv.com |
| **9** | **Host Supervisor: *Who, from your Organisation, will be supervising the Project?*** | As above. |
| **10** | **Supervisor Title:** |  |
| **11** | **Department:** |  |
| **12** | **Telephone(s):** |  |
| **13** | **Email:** |  |
| **14** | **Project Title:** | BLE mesh tags and paired Smart phone App to map, monitor and alarm teachers of increasingly distant student proximity whilst on excursions. |
| **15** | **Referred by: *Who referred the Client/Organisation to Swinburne?*** | Ali Yavari, Swinburne |
| **16** | **Estimated Project Length:  *e.g. 1 semester (12 weeks), or  2 semesters (24 weeks)*** | 2 semesters |
| **17** | **Project Description:**  ***Brief description of project being undertaken.  (One Project per Pro-forma please)*** | Bluetooth mesh allows the networking and proximity monitoring of Bluetooth Low Energy (BLE) beacons / tags.  This project will develop, road test and refine an App that enables teachers to monitor the proximity of students within a class group who are wearing BLE tags by whilst on excursion.  Primarily, if a student wearing the beacon moves outside a specified range, (especially if BLE connection is lost) the monitoring App will sound an alarm and notify the teacher/s which child is ‘missing’.  Potential extensions might include;   1. Map to demonstrate where the missing child was physically located within the networked group just prior to the connection being lost 2. Search features to help reconnect / find the student, 3. An alarm to notify the student who has moved outside the group to say still, 4. Alarm that notifies children to prompt a nearby friend to catch up. 5. A screeching emergency sound alarm for student protection |
| **18** | **Project Specialisations Area:   *e.g. Research, Mobile Application Design(Android & IOS); Database Design; Network Design & Security; Robotics; Application Development; Systems Analysis & Design; Web Development & Design etc.*** | * Mesh network design opportunities   + What features can the product offer? * Market research   + How do features match the real-world teacher needs?   + Are there any competing products and how will we compete? * IP research – How to protect IP and markets/ Innovative design, patents, first to market, and/or better hardware or business model? * What other markets might there be for the product format? * BLE beacon design - bracelet, pin on device, neck lanyard? |
| **19** | **Project Skills:   *Brief description of any specific skills students will require undertaking this project. e.g. Business Analysis; Systems Analysis; Project Management; Software Programming; OIS; Android; Business Intelligence etc.*** | Students will need to understand   * Smart phone and BLE beacon technologies * BLE technical capabilities and potential to service real teacher needs * Cost bene fit options   Challenges;   * Beacons do not usually allow constant connection with smart phones (they connect then disconnect for security reasons). The App is likely to require constant connection. * Proximity monitoring is not especially accurate. Can we deliver at least * Identifying current or most recently detected location within a group of networked devices may be challenging. |
| **20** | **Project Environment:   *Hardware/Software/ Programming Languages e.g.***  ***Android; IOS; C++; HTML; CCS3; Java; SQL; Visual Basic Script; Visual C++; XML, UNIX, Windows etc x*** | Bluetooth Low Energy (BLE) 5.0  BLE Mesh networking  iOS and Android App development |
| **21** | **Research Component:**  ***(Where applicable use this section to state topic of research relevant to this project. This may be part of the project or the entire project)*** | BLE mesh and Smart phone App design and integration   * Prospects and limitations of the BLE platform? * Range of potential App features? * Minimal product requirements   BLE beacons   * Preferred features and supplier? * Preferred BLE tag design?   Market research   * Real needs of primary school teachers? * Other potential markets?   Business research   * Size, value and most profitable route to market? * Competing products / technology * Blocking IP? |

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| **Overview of this Proposal** | |
| 1. The purpose of this exercise is to provide an educational opportunity for the Student(s) to obtain real-world experience as part of their course of study. 2. The Contracting Party or Host Organisation wishes to support the skills development of the Students by providing details of their project to Swinburne and agrees to provide the Students with the opportunity to undertake the Project. 3. All parties acknowledge that Project details may vary as the skills of the Student(s) are assessed or the Project requirements change. 4. Neither Swinburne nor the Student(s) provides any guarantee in relation to the quality, originality, operability, delivery or any other aspect of any work undertaken or material produced by the Student(s) as part of the Project. 5. Swinburne will provide a “proof of concept” or “prototype” for the client and not a commercially ready product. 6. The relationship between the parties is voluntary and involves no payment or only nominal work experience payments within regulatory requirements. 7. Swinburne will arrange for the Students to assign any Intellectual Property in the Projects to Swinburne. Swinburne will then assign the Project IP to the Contracting Party or Host Organisation. 8. The Contracting Party, or Host Organisation, and Swinburne agree to perform their obligations in accordance with the terms and conditions of the STUDENT PROJECT AGREEMENT. 9. The STUDENT PROJECT AGREEMENT will be issued to the Contracting Party or Host Organisation once their Project has been accepted by Swinburne and students have been assigned to the project. | |
| **Permission to market the Proposal to Students** | |
| *Swinburne University seeks permission to market an overview of your project to prospective students, as an example of the types of projects offered under the Internship Project unit.  NB: No company or personal details will be identified.* | |
| I Agree to allow details of this proposal to be marketed to prospective students. | |
| **Name:** | Peter Mountford |
| **Date:** | 12/1/2019 |

**Send this completed Capstone Proposal to the Capstone Projects Coordinator, Faculty of Science, Engineering and Technology, Computer Science and Software Electrical Engineering  
email: rbartels@swin.edu.au**