**A Practical Approach to 'Secure Software Architecture' in Software Engineering**

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| Time | Topic | Presenter & Overview |
| **9:00-9:30** | Coffee and chat |  |
| **9:30-9:40** | Intro & housekeeping | **Peter Davis** |
| **9:40-10:00** | Making VSCode work for you and your students. A simple do-it-all IDE for all Software Engineering projects. | **Ben Jones**  Overview of VSCode capabilities and teachers will set up a Python profile with helpful extensions for Python Flask. |
| **10:00-10:20** | Morning tea |  |
| **10:20-11:00** | Ben Jones (ITD) views from a Software Architect and Director of Networks and Monitoring. | **Ben Jones (ITD)**  Teachers will attend a presentation by Ben Jones, an experienced Software Architect who is currently the Director of Networks and Monitoring with the NSW Department of Education ITD. |
| **11:00-12:00** | Overview of Python Flask | **Daniel Covassin & Ben Jones**  An overview of the basics of FLASK focusing on its architecture, debugging and the built-in Janga2 template engine. Teachers develop a simple Flask app with a GET app route, template and partial. |
| **12:00-13:15** | Practical software security activities | **Ben Jones**  Demonstration, discussion and testing of exploits/vulnerabilities listed in the syllabus. Teachers will test the different exploits on the Unsecured PWA and discuss/apply potential countermeasures. |
| **13:15-13:40** | Lunch |  |
| **13:40 - 2:40** | Practical software security activities | **Daniel Covassin**   * Demonstration, discussion and testing of ‘Broken Authentication and Session management’. Teachers will implement a login algorithm with two-factor authentication (2FA) to their Flask App. |
| **2:40-3:00** | GitHub demo | **Ben Jones**  Overview of GitHub to support cloud-based programming and easily address collaboration syllabus content. Teachers will have an opportunity to open a GitHub account and deploy their app in a codespace. |
| **3:00-3:40** | Andrew Jackson, Manager Cyber Response and Digital Forensics ITD | **Andrew Jackson**  Teachers will attend a presentation from Andrew Jackson, Manager of Cyber Response and Digital Forensics with the NSW Department of Education ITD. Andrew will share his real-world experience with concepts in our syllabus, including vulnerabilities, mitigations, and pen testing. |
| **3:40-3:45** | Evaluation and close | **Peter Davis** |

Resources: <https://github.com/TempeHS/Upkilling_for_SE_Teachers_Resources>

Dependencies: VSCode ([eT4L Software Catalogue](https://softwarecatalogue.det.nsw.edu.au/application/details/visual-studio-code-v1_91) or <https://code.visualstudio.com/>), Python ([eT4L Software Catalogue](https://softwarecatalogue.det.nsw.edu.au/application/details/python-v3_12_6) or <https://www.python.org/>), Git ([eT4L Software Catalogue](https://softwarecatalogue.det.nsw.edu.au/application/details/git-for-windows-v2_45_1) or <https://git-scm.com/>), GitHub Desktop ([eT4L Software Catalogue](https://softwarecatalogue.det.nsw.edu.au/application/details/github-desktop-v3_3_12_0) or <https://desktop.github.com/download/>)