University of Essex

Action Plan - Secure Software Development (Computer Science)

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Where do I want to be by the end of this period/year?
What do I want to be doing? (Include as many learning needs as required to achieve agreed objectives)

What do I want/need to learn? Provide a specific description of the desired changes (e.g. skills to gain, knowledge to acquire, topics/ themes/content to cover)	**What do I have to do to achieve this?** Some examples, a new/ongoing course, conference, self-development (like wider research or reading), coaching/mentoring, job shadowing	**What resources or support will I need?** Some examples, teaching staff support, library support, student advisor support, line manager, etc.	**How will I measure success?** Some examples, appraisals, course assessments, team feedback, tutor feedback	**Target dates for review and completion** Note that these need to be realistic/achievable
Proposing a secure software design document in a team setting	- Watch lecturecasts - Attend live seminars - Wider research/reading About OWASP top ten web application risks and top ten protocols - Collaborate with group mates	- Lecturecasts - Module reading requirements - Project management tools like Miro - Online communication tools like WeChat and Zoom	- Tutor feedback on design drafts - Sprint reviews - Sprint retrospectives - Constant communication with teammates	**Review:** -Weekly meetings in Units 1-6. -Team consultation with tutor on April 4th, 2024 **Completion:** -Design document deadline on April 22nd, 2024
Individual coding output of the design document with security features	- Review UML - Study ontology design - Watch videos about API - Work on all coding activities recommended in this module - Watch lecturecasts - Attend live seminars	- Tutorial videos on how to make an API - Practice Django and Flask coding in Python - Github source codes for coding practice - Team design document	- Security measures will be implemented in the coding output - Application can be presented in an API - Application will run during the API demonstration	**Review:** Units 9-11. **Completion:** Submission of the development individual project on May 27th, 2024

Secure software development techniques (Regex, cryptography, testing, using linters, etc.)	- Watch lecturecasts - Attend live seminars - Work on e-Portfolio and seminar activities - Research - Module readings	- Module readings - Module activities - Online research	- Accomplishment of e-Portfolio and seminar activities	**Review:** Units 3-12 **Completion:** Submission of e-Portfolio on June 3rd, 2024.
e-Portfolio	- Work on e-Portfolio based on tutor feedback - Continue developing the e-Portfolio website - Provide artifacts of my learnings for each unit	- Github - PyCharm - Google drive	- Evidence of unit artifacts are provided in the e-Portfolio. - Reflective Piece - Tutor feedback on e-Portfolio and Reflective Piece	**Review:** Units 1-12 **Completion:** Submission of e-Portfolio on June 3rd, 2024.

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Reference:

University of Essex Online (N.D.) Creating your e-Portfolio. Available from: https://www.my-course.co.uk/mod/book/view.php?id=397323&chapterid=4270 [Accessed: 15 February 2024.]