

Summer Undergraduate Research Programme 2021

Project Number & Title:	<p>Project 15</p> <p>Secure Client-Side Management of Credentials for Accessing Web Application APIs</p>
Project Details	<p>Modern web applications frequently rely on the interconnection of client-side interfaces and authenticated, web-based application programming interfaces (APIs). To support this pairing, client-side implementations must manage credentials which allow for interaction with connected APIs. These credentials must be managed (stored and transmitted) in a manner that is secure and hardened against credential leakage to, or misuse by, unauthorised actors. An applicant with an interest in web development and security is sought to investigate best practices and the state of the art for implementing secure management of credentials in client-side applications. The successful applicant, on completion of their research activities, will be expected to produce a report describing the problem space and implementation state of the art, and to produce sample code demonstrating best practice implementation.</p>
Profile of Candidate	<p>Applications are sought from students completing the 2nd, 3rd, or 4th year of a computing (or related discipline) degree in DkIT. Prior experience working with web APIs, single-page applications (SPAs), or progressive web applications (PWAs) is an advantage but is not required.</p>

Project Supervisors	Shane Gavin, Gordon Boyle All enquiries to shane.gavin@dkit.ie
Duration	6 weeks
Number of Positions Available	1
Amount Awarded (per candidate)	Weekly stipend of €150 (tax free)
How to Apply	Submissions to mary.matthews@dkit.ie