Round	14
Grant #	M81
Applicant Name	Dr. Reza Parizi
Applicant Position	Assistant Professor of Software Engineering
Applicant Institution	Kennesaw State University
Applicant Email Address	rparizi1@kennesaw.edu
Other Team Members	Individual
Type of Project	Creation of ancillaries for pre-existing OER
Course Number(s) and Title(s)	SWE 4490
Final Semester of the Project	Spring 2020
Proposed Grant Funding Amount:	$2,800.00
Currently-Existing Resource(s) to be Revised / Ancillaries Created	SWE 4490: Fundamentals of Blockchain and Smart Contracts http://facultyweb.kennesaw.edu/rparizi1/SWE%204490%20Course%20Syllabus.pdf
Project Description	Blockchains and Smart Contracts are important emerging developmental models. Rapid advances are being made in the blockchain world, as evidenced both in the number of research papers and the number of active industrial projects. There has been a huge shit of focus in both academia and the industry toward the new generation of decentralization in software applications on top of the blockchain and smart contracts due to its capabilities of transparency, trust, integrity, and security preserving. Blockchain is a foundational platform and it is expected to be a key enabling technology to revolutionize a wide range of business activities and interactions considering its economic, political, humanitarian, and legal system benefits. The main goal of this mini-grant project is to develop hands-on supplementary materials and use cases for the innovative course (SWE 4490) 'fundamentals of blockchain and smart contracts' that is being offered by the PI in the college of computing and software engineering at Kennesaw State University. This course will be complemented with a hands-on experience developing the token economy and Decentralized Apps (dApps) for FinTech. The plan specifically is to develop open source materials that include practical labware, walkthrough tutorials, and team projects with the use cases that includes FinTech sector. The current version of the

	course include materials developed in 2018 with not many real-world use cases, and has not seen any major revisions since (this area is a fast-paced emerging area). The new materials will cover an update of both content and structure, and will support the current learning outcomes for the course by providing more thorough and detailed lab activities that more closely align with lecture content. Practical lab/tutorial activities will be redesigned to facilitate entrepreneurial and critical thinking about the ways in which current trends in blockchain world affect today's businesses and new industries such as FinTech. The produced materials will be delivered to faculty and students using D2L and will also be made available publicly through GitHub and other open source channels.
Timeline and Personnel	Milestone 1 – develop new programming assignments/labs/tutorials, and test their feasibility according to the learning outcomes of SWE 4490. Milestone date: 8/5/2019. Person responsible for the milestone: Dr. Reza M. Parizi. Milestone 2 – design new team developmental projects with specific use cases in various industries including FinTech, Healthcare, and banking to name a few . Milestone date: 10/5/2019. Person responsible for the milestone: Dr. Reza M. Parizi. Milestone 3 – design research projects in blockchain space for further discover. Milestone date: 11/15/2019. Person responsible for the milestone: Dr. Reza M. Parizi. Milestone 4 – incorporate the new materials for continuous delivery and improvement. Milestone date: 12/5/2019 or date specified by ALG. Person responsible for the milestone: Dr. Reza M. Parizi.
Budget	Dr. Reza M. Parizi – course developer - $2000 Travel/Equipment (purchasing VMware, IBM cloud server, and AWS EC2)- $800. Total $2800
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