

<b>Application Number</b>	M71
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<b>Type</b>	Revision of pre-existing OER
<b>Course Number / Title</b>	caubert@augusta.edu
<b>Final Semester</b>	Spring 2020
<b>Grant Amount</b>	\$2,800.00

**Works Being  
Revised**

CSCI 3410 - Database Systems -- Lecture Notes (Draft)  
<http://spots.augusta.edu/caubert/db/ln/> (licensed under the CC BY 4.0 licence).

<b>Description</b>	<p>My goal is to deliver a cross-platform, all-in-one resource on database systems for undergraduate, enthusiast high-school students, and persons in continuous training. The same document would be available to consult on-line (on a webpage), to print (as a pdf) as well as to edit (as a word document) and would contain:</p> <ul style="list-style-type: none"><li>- A large collection of exercises, exams, problems, as well as selected solutions,</li><li>- A "hands-on" guide to install, configure and run various database management systems,</li><li>- A compact guide to the most fundamental definitions and notions of the topic at stake,</li><li>- Organized and up-to-date references.</li></ul> <p>This document would be used</p> <ul style="list-style-type: none"><li>- in class, in place of an expensive textbook (Fundamentals of Database Systems (7th Edition), ~ \$185), as a support for teaching, as a replacement for individual homework, and to practice exams.</li><li>- as a possible complementary resource for AIST 3410 - Database Management Systems, taught at Augusta University as well,</li><li>- as a reference guide by alumni,</li><li>- by anyone willing to practice core knowledge on database design, programming, study and implementation.</li></ul> <p>I believe this document would be well-received, for it fills the need for a textbook on database that</p> <ol style="list-style-type: none"><li>1. Incorporate the recent and popular NoSQL approach as a whole part, and not just as a side-topic,</li><li>2. Address the question of database from the design to its implementation in a streamlined way,</li><li>3. Place security at its core, instead of treating it as an afterthought.</li><li>4. Has its source code freely available and editable</li></ol> <p>A deep search on both <a href="https://www.merlot.org/">https://www.merlot.org/</a> and <a href="https://open.umn.edu/">https://open.umn.edu/</a> shows that no textbook meets all those requirement, and a total lack of res sources on NoSQL.</p>
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<b>Timeline</b>	<p>I will teach this class in Spring 2019 and Spring 2020,</p> <ul style="list-style-type: none"><li>- Spring 2019: Polishing, testing and assessing the bank of problems, questions and tutorials. -- This part should be done and could be delivered independently as an "exercise textbook".</li><li>- Summer 2019: Writing of additional material on security and professional responsibilities. -- Those could be delivered independently as blog posts.</li><li>- Fall 2019: Hiring of a student assistant to proof-read, test and comment on the current draft throughout. The student would have ~60 hours to revise the material and discuss it with me.</li><li>- Spring 2020: Implementing the modifications suggested during the Fall 2019, completing the narrative, updating the references and links to external resources.</li></ul>
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<b>Budget</b>	<p>\$2,000: Salary for team member</p> <p>\$780: Salary for student assistant hired to test and proof-read the resource (\$13 an hour, for 4 hours per week during 15 weeks)</p> <p>\$10: Donation to Rocketgit (<a href="https://rocketgit.com/">https://rocketgit.com/</a>), an on-line-service that hosts the source-code of the project for free</p> <p>\$10: Donation to Pandoc (<a href="http://pandoc.org/">http://pandoc.org/</a>), a free software used to typeset the document.</p>
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