DSLP: A Web-based Data Science Learning Platform to Support DS Education for Non-Computing Majors

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The presenters will demo a web-based Data Science Learning Platform (DSLP) that makes data science education accessible to students with limited or no programming background. The DSLP platform offers students with several benefits such as: (1) learn a web-based user interface to perform data science tasks without requiring coding, (2) explore popular Python data science libraries through real-time code exemplification to prepare them for advanced data science topics, (3) become familiar with the on-site user guide and helpful tips to make the platform easy to use (4) write their own code within a sandbox, and (5) monitor their usage of the platform. The demo will walk through the steps of using the DSLP to perform various data science tasks and the participants will be able to try out the features mentioned above. The demo will also cover the design of course materials, including hands-on practices and lab assignments using the DSLP platform. The typical participants include instructors who are interested in teaching introductory-level data science to high school students or non-computing college majors. Participants will need to have a laptop with access to the Internet and a current web browser installed to access the web-based learning platform. This demo describes work supported by the National Science Foundation under Award 2021287.

Keywords: data science curricular materials; non-computing majors; learning platform

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