Abstract

There has been a long standing problem in our college system— a severely imbalanced workload of one advisor servicing approximately 400 students leads to too many instances of human error. These mistakes have serious effects, costing hundreds of students extra time, money, and effort in their degree plan journey. Our software utilizes artificial intelligence to generate optimal degree plans tailored to an individual’s specific needs and expectations to graduate them in the least amount of time. These plans can be modified by both the student or their advisor; DegreeChamp’s digital interface allows for both parties to effectively collaborate on each degree plan.

This semester our team collaborated on redesigning and adding features to DegreeChamp’s legacy web application. Soon after we went to work on designing and developing a cross-platform mobile application.

Results

With DegreeChamp, students are provided with a sleeker, logical and transparent tool to ensure success in their academic careers. The AI technology utilized in our product allows students to make smarter, optimal solutions when planning their degree. Students are able to access their plans 24/7 and major changes are always verified by advisors before implementation, which ultimately saves students invaluable amounts of time and money.

Impact

With DegreeChamp, students are provided with a sleeker, logical and transparent tool to ensure success in their academic careers. The AI technology utilized in our product allows students to make smarter, optimal solutions when planning their degree. Students are able to access their plans 24/7 and major changes are always verified by advisors before implementation, which ultimately saves students invaluable amounts of time and money.

This semester our team was able to redesign and improve upon DegreeChamp’s legacy web application as well as jumpstart the development of a working mobile app, all the while performing unit tests on real UTD students to ensure efficacy.

Performance

Our UTDesign team’s redesign and additional features for DegreeChamp’s legacy software have already been integrated into production. Additionally, the web application is being tested by 550 Software Engineering students in a paid pilot.

DegreeChamp’s mobile product is going to be further developed by the DegreeChamp team before the release of a private beta version.

Summary

This Fall 2018 semester, our talented team of both CS and ATCM students collaborated on DegreeChamp, an exciting new AI degree planning tool. We were able to iterate on its legacy software and redesign their web application, as well as begin mobile development on their React Native app.

DegreeChamp is comprised of several working industry development tools—Bootstrap and React Native, Python, Django libraries, PostGreSQL and UTD’s own PeopleSoft.

Our UTDesign team is confident that DegreeChamp will live on to be a successful, helpful tool that will efficiently and effectively help students from all over in their academic careers. Heavy workloads on academic advisors will be alleviated, invaluable amounts of students’ time and money will be saved, and the two parties will be able to more easily collaborate and communicate on each individual degree plan to avoid costly mishaps in the future.