The 360 Degree Approach: Patient Forward App Development in the Healthcare Space

The reputation of a company, product, or service is no longer constructed by itself or the media, but by the recipients of those products and services through honest feedback in a digital, collaborative environment. The most successful services encourage and respond to honest feedback from their users. The best restaurants pay attention to services that aggregate feedback, such as Yelp, maybe by increasing the supply of favorite menu items or rewarding employees that are called out for good service. The best products read their product reviews on Amazon; they compensate for dissatisfaction and they commit to consistency in their most in-demand products.

The Jefferson Teamwork Observation Guide (JTOG™) is a responsive, modern mobile application designed to bring this honesty to healthcare. The app helps to evaluate teamwork at a healthcare system from all possible angles, giving a true 360 degree view of the experience of all participants in a medical setting. A patient's experience in a health system is hardly ever the result of a single employee of that health system, but rather a team of people dedicated to that patient’s care, who all have a role in taking care of that patient’s particular needs. The best teams, just like the best restaurants, respond to open, honest feedback from the members on that team. In health systems, this includes the patient, the team member who should have the loudest voice.

The JTOG™ mobile application, available on iOS and Android, offers users a way to evaluate teams as a whole, the individuals on those teams, and themselves through a collection of surveys. Patients are also able to evaluate the team that cared for them through an anonymous survey. Patients who are unable to complete the survey themselves can have a support person/family member complete the survey on their behalf. To encourage honesty, any user can submit surveys anonymously. However, educators have the option to submit evaluations of students which display their name, so that students can feel free to discuss their feedback with their teachers/mentors.

JCIPE partnered with Jefferson’s DICE (Digital Innovation and Consumer Experience) Group to develop the JTOG™. The DICE Group houses application developers and designers who build solutions and tools to improve student and patient experience at Jefferson and for other healthcare organizations. JCIPE and the DICE Group worked together for three months to develop and deliver the app. Using an “agile” process of software development, the DICE team continually met with the JCIPE clients, week by week, to ensure that the product’s trajectory matched the client’s trajectory. Things change constantly in every industry and every business, and simply having a long up-front meeting where the client tells you what the app should do often doesn’t cut it anymore. The agile process does require a larger time investment from the client, but in many cases it results in a higher quality product than other processes.

The DICE team presented weekly demos to JCIPE, demonstrating the latest prototypes and gathering feedback from the clients. The team...
at JCIPE was insightful, with recommendations that truly improved the quality of the app, but was also willing to compromise and work through issues that surfaced during the design and development of the app. Through the process, the DICE team was committed to delivering a platform that would evolve with the needs of JCIPE. By following an agile process, we were able to learn more about what is most important to the JCIPE team and shift our design accordingly. As a result of what we learned, the DICE team also built a web-based administration console that allows JCIPE employees to manage and add organizations to register and take surveys through the JTOG™ app. The team also made use of a database that other groups at Jefferson are able to use in order to build on top of the JTOG™ platform. The Center for Teaching and Learning (CTL) at Jefferson is already building a data portal and set of reports for the JCIPE team, leveraging the survey data sets that users submit through the app.

At the end of the day, the project was a success because both parties, client and developer, were committed to delivering a quality product that solves a problem in healthcare. We at the DICE team believe that the JTOG™ app is a success story when it comes to collaboration between healthcare professionals and engineers.

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