SUPERFAST STARTUPS

NUvention: Web helps students create software companies in record time

At the end of their first quarter of NUvention: Web—a sequence of two courses in which students develop and launch software companies—a team of students stood before the course’s advisory board and pitched their idea. It’s an iPhone app, the students explained, that scans your music library and organizes your playlist according to your moods or activities. It seemed like a good idea to the students, but the board thought otherwise.

“We got ripped apart,” recalls Neal Ehardt (computer science ’12). “We were advised to stay away from music, and we were told that the idea was not enough for a business.”

But by the end of spring quarter the group came back with a new idea—an iPad music magazine for the 21st century—and the reaction was enthusiastic. By the end of the summer the team had raised $150,000 and was gearing up for a launch.

That kind of speedy success story is the hallmark of NUvention: Web, one of a suite of experiential learning courses offered by Northwestern’s Farley Center for Entrepreneurship and Innovation. The course takes students from schools across the University, puts them into multidisciplinary teams, and charges them with creating software companies that address current or future needs. Coached by faculty members, successful alumni, and web entrepreneurs, teams explore a suggested area (smartphones or tablets, for example) and are given two quarters to turn an idea into a company. Over those two quarters they hear lectures from top Northwestern professors and at the end of each quarter they present their ideas to an advisory board that includes successful entrepreneurs, venture capitalists, and executives.

The course is chaired by Todd Warren, who spent 21 years at Microsoft serving as corporate vice president from 2004 to 2008 and developing the technical product strategy for Microsoft’s Windows Mobile operating system and related products. After retiring in 2008, Warren—who serves on Northwestern’s Board of Trustees and the McCormick Advisory Council—came back to McCormick to teach a software engineering course. He spoke with Farley Center director Michael Marasco about NUvention: Medical Innovation—which focuses on creating medical devices—and the two began to create a similar course using Warren’s experience.

Several successful apps came out of the first NUvention: Web course in 2010, including a navigation app for the Lincoln Park Zoo (see spring ’11 McCormick magazine) and a company called Adaptly, a service that allows businesses to buy ads on multiple social network ad platforms simultaneously. Adaptly, cofounded by Nikhil Sethi (electrical engineering ’10) and Garrett Ullom, a computer science junior who put his studies on hold to start the company, has gone from two guys working out of Sethi’s studio apartment to 25 employees working in a Manhattan office. The move was made possible by a round of fundraising that garnered the company $2 million. Adaptly’s clients now include Pepsi, General Electric, Arby’s, and News Corp., among others.

“We’re continuing to expand our business and chug away,” Sethi says. “But we still have all of our old desks in my living room. It’s kind of weird that I haven’t replaced them with a sofa and television yet.”

Sethi, who founded another company his sophomore year in college and was recently named an “All-Star Student Entrepreneur” by Forbes magazine, says he feels comfortable in a business setting, while his engineering background gives him the ability to understand the technical aspects of the field. He still gets advice from professors and alumni affiliated with the Farley Center, however. “Those advisers and investors have supported our every decision,” he says. “Without that program we wouldn’t be where we are.”

Success stories like Adaptly have made the NUvention: Web one of the hottest courses on campus. “We could probably do two sections and still have people who couldn’t get into it,” Marasco says. “Through this course you can actually create an app and launch it across multiple platforms in less than six months.”

This year Marasco and Warren reengineered the class to make way for
tablet computing (which wasn’t as pervasive a year ago) and to create more opportunities for smartphone apps. They tried to get students to focus more on customer needs and embraced a concept called the “lean startup,” which focuses on creating shorter business models rather than long business plans. “It helped our non-Kellogg students get a better grasp on business concepts,” Marasco says.

Then they let the students run with their ideas.

VIRTUAL SAVINGS

Picking an idea that sticks is the first challenge for many student teams in NUvention: Web. The members of one team knew they wanted to do something local, something that would appeal to the Northwestern student base. Perhaps a smartphone shopping app, they thought, or a dating app. “We had 30 or 40 ideas on a list,” says Austin Asamoa-Tutu, a student in Kellogg School of Management. “We just kept at it, going back and forth.”

“One day we just picked one,” says Kalan Kircher (biomedical engineering ’11). The team would create an app that would benefit local businesses. But what did those businesses need? The team walked around downtown Evanston and talked to shop owners: What problems did they face? What sort of technology could help them?

Eventually the team approached Downtown Evanston, the local merchants’ association, which had recently begun selling a gift card/coupon package called “Passport to Evanston.” That could be an excellent starting point for an app, the team realized. Downtown Evanston agreed, and the team got to work on creating virtual coupons. Within six months they had launched SweetPerk, a smartphone shopping app available on the Android and iPhone platforms that helps residents and visitors discover great perks at more than 75 participating businesses in downtown Evanston. The app also includes a business listing complete with maps, store and restaurant information, and phone numbers.

“We want to make hyperlocal shopping more digital,” Asamoa-Tutu says. “Bigger companies don’t offer that. We saw the need and wanted to bring the benefit of prevalent technology to local businesses in a simple and effective way.”

The app launched May 26 with more than 450 downloads in its first 12 days, and the team expects to surpass 10 times that in Evanston by the end of the year. “The team launched Android and iPhone versions of their app before the course was over,” Marasco says. “That has never happened before in NUvention: Web and really shows the nature and potential of the app business.”
Getting the app to the marketplace took two quarters of hard work: team member Christopher Francis, a computer science graduate student, spent several hours learning how to program an Android app, and the group spent much of its time brainstorming ways to track redemptions of Evanston's virtual coupons. Members eventually settled on specially designed quick response, or QR, codes, which smartphone users can scan to gain access to information created by a business. Each business would have its own QR code at its register, and a customer using the app would just scan the code, and the program would keep track of usage.

The idea proved a little rougher in practice. For example, some stores have several cashiers and each would have to be trained to use the system. But ultimately the idea worked. The app—with interface design by Phil Dziedzic, a graduate student in engineering design and innovation—gives users a list of businesses in different categories (shopping, restaurants, etc.). When a user chooses a business, he or she receives a page with the business's name, a description, a map, the phone number, and a “redeem” button that activates the code scanner. Over the summer the group added more features, including benefits for loyal customers, and worked to expand their idea to other parts of Evanston and shopping malls. Team members are currently looking for funding to help them expand their idea.

“It’s fun,” says Kircher, who deferred a job offer for a year to keep working on SweetPerk. “You’re personally invested in every single move your company makes. The decisions you make each day affect whether you succeed or fail. I found there were times when I knew I should be doing my homework, but I really just wanted to work on the business. It’s great to be excited about something like that.”

“It’s fast paced and exciting,” Dziedzic says. “That’s great for me, because I get bored easily.”

Asamoa-Tutu, who worked for eight years as a software manager before enrolling in Kellogg, says his professors have stressed the idea that entrepreneurs have the opportunity and responsibility to create new businesses and jobs in tough economic times. “That merged really well with why I came to school,” he says. “Especially in a recession, being part of creating jobs has so much meaning for me.”

The group has big plans for SweetPerk, but for now it is proud of coming up with an idea and putting it into practice within two short quarters. “It was a monumental effort,” Asamoa-Tutu says. “I think we all buy into the same vision. It’s really exciting.”

A MUSIC MAGAZINE FOR THE 21ST CENTURY

After the NUvention advisory board ripped apart their iPhone music app idea, members of that team knew they had to change their concept—but they ignored the board’s advice about the music industry. Sure, the old guard
wasn’t making any money off of record sales, but there was still money to be made. “Music services are actually doing really well,” says Jeremiah Seraphine, a graduate student in integrated marketing communications at the Medill School. And music was where the team’s passion lay: Neal plays the drums, while Jeremiah is a coowner of the record label Revolutionary Music.

So they concentrated on creating an iPad app and came up with an idea that ultimately impressed the board: a personalized music magazine called Groovebug that scans your music library to offer artist information, news, videos, concert dates, and recommendations for similar music. It’s the type of magazine that couldn’t have existed 10 years ago but now seems like an inevitable and necessary realization of both music and information technology trends.

“The concept of developing a music magazine that synchronizes with your own music collection and gives you up-to-date content on what’s going on with that band hasn’t been done before,” Marasco says.

The app works by pulling content from websites including EchoNest, YouTube, Last.fm, and Google custom search. Those sites pull news from thousands of other websites and blogs and build recommendations using specialized software. “All of this content is out there for free,” Ehardt says. “We figured it would be nice to have this all pulled together for you on your iPad.”

The team surveyed potential users about their needs and priorities, then designed an interface that pulls together the content into a stylized magazine experience. “With most music magazines, you are limited to what they curate for you,” Seraphine says. “Groovebug gives you the content you want and replaces the experience of looking through a record album. With mp3s, you don’t have anything to look at. This is what a record cover should look like in the 21st century, merged with the concept of a magazine.”

The group used its music knowledge to choose news sources (including more than 2,000 blogs) and spent hours testing the results to make sure that a search for “Prince” brought up the musician and not an heir to the British throne. Members then released the app to a group of beta testers and tweaked the concept based on user demand.

At the end of the second quarter of NUvention: Web, the team returned to the site of its earlier dressing-down and received its reward: the board was so impressed with Groovebug that they told team members their business was worth more than the team had stated; one board member even offered to be the first investor.

The group spent the following summer in the Farley Center’s incubator space in downtown Evanston, refining the app and raising $150,000 in seed money, much of it from alumni. It launched the app September 8.

The Groovebug group hopes to make money through affiliate relationships with mp3 and ticket sellers and eventually hopes to provide artists with a platform to promote their music on the app. But before that happens, the team must convince users that Groovebug is the music magazine of the future. “Right now it’s all about the ultimate customer experience and making our customers happy,” Seraphine says.

Groovebug was just one of several NUvention: Web teams in the Farley Incubator space in downtown Evanston last summer. The office space is available free for up to a year to NUvention teams and other students who apply; it offers both a physical address and a chance for teams to network with other Northwestern startups. This past summer the incubator housed businesses that ranged from creators of apps that allow users to review restaurant menus or find taxis to a developer of diagnostic devices for women’s reproductive health.

Marasco says the space has been key in helping make teams successful. “They’ve had a place to go, with support from us, after the course has ended,” Marasco says. “There’s been a lot of excitement, and we hope that will continue to grow.”

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MICHAEL MARASCO