As the roar of the ‘L’ recedes, a Chicagoan walking nearby suddenly hops, skips and jumps across a colorful hopscotch pattern projected on the ground. This interactive visual game isn’t a reality just yet, but it’s one of many ideas workshopped by CDM students involved with The Wabash Lights, an urban art installation located just north of DePaul’s Loop Campus. Stretching from Adams to Madison streets along Wabash Avenue, the initiative is intended to promote public engagement with the city environment.

The Wabash Lights were conceived by creative strategist and brand consultant Seth Unger (THE ‘04) and filmmaker and director Jack Newell. They envisioned placing 5,000 colorful, programmable LED light tubes on the underside of the ‘L’ tracks. In 2016, Unger and Newell approached CDM about collaborating with students, and the college agreed to create two School of Design courses focused on The Wabash Lights’ infrastructure for the winter and spring 2017 quarters. The first course offered students an opportunity to develop applications and concepts, while the second course focused on building prototypes of those ideas.

Jimit Shah, who is majoring in human-computer interaction, worked on the interactive projection team that created the hopscotch prototype. “We set out to design an interactive solution for The Wabash Lights that would be communal, energetic, engaging, fun and personal,” he says. In addition to the hopscotch game, the group proposed four other games that use the light tubes in various ways. For example, another game pits four players against one another in a race to be the first to step on projected shapes; this movement activates the light tubes, visually illustrating which player is winning.

As the team worked on this prototype, they quickly learned the importance of usability testing. “A lot of our assumptions turned out to be wrong,” Shah explains. “Designs are only a success if they satisfy the user’s experience, and therefore, they need to be tested regularly.” Shah adds that he became more adept at testing on-site, handling impromptu problems and coordinating with multiple partners throughout the course.

Working within a team helped Michael Estipona, a master’s in human-computer interaction student, develop better communication skills. “Graphic designers understand best with pictures,” he says. “I used stick figures to get my point across!” Another challenge was the 10-week time frame, which didn’t allow much leeway in terms of implementing the project plan. “If we had narrowed down the scope a little, we would have had more time to get to where we wanted with our final product prototypes,” Estipona notes.

Nonetheless, he was pleased with the concepts developed by the information visuals team. Both ideas use real-time, open-source data to alter the colors of the light tubes. One prototype drew on Twitter feeds to visualize people’s emotions, while the other analyzed Chicago Transit Authority data to illustrate the path of incoming and outgoing trains. “I definitely honed my skills in UX research and project management,” Estipona says.

Both he and Shah hope to remain involved in the project. “Technology can play a major role in entertaining people and beautifying a neighborhood,” Shah says. “It was a pleasure using our education to give back to society.”

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