GUDP

GLOBAL URBAN DEVELOPMENT PROGRAM
2014-2015

Call for Participants

Research project by Cloud Architecture Lab

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1. EXECUTIVE SUMMARY

In today's rapid globalization, efficient collaboration between global professionals, data-driven research, and digital tools will become increasingly crucial to successful project delivery. The Global Urban Development Program was created in 2011 as a research project challenging students from different disciplines and educational backgrounds in virtual collaboration and project-based learning. In 2012, the pilot round brought together students from partner institutions Stanford University and Ljubljana University and yielded successful urban design projects. Since the pilot, a new architectural practice called Cloud Architecture has been established. The ultimate goal is for GUDP to become a research arm of the practice that connects academia to industry, where students and young professionals can collaborate and develop new ideas and tools which can be applied to future urban and architecture projects.

The second round of GUDP will take place in the 2014-2015 academic year and partner with professional partners to challenge the student teams in real-life research questions and urban development problems. Through this presentation, we are seeking synergistic support from potential clients, companies, mentors, and institutions to enrich the Global Urban Development Program team and experience.

cloud thinking

business

technology

PROJECT
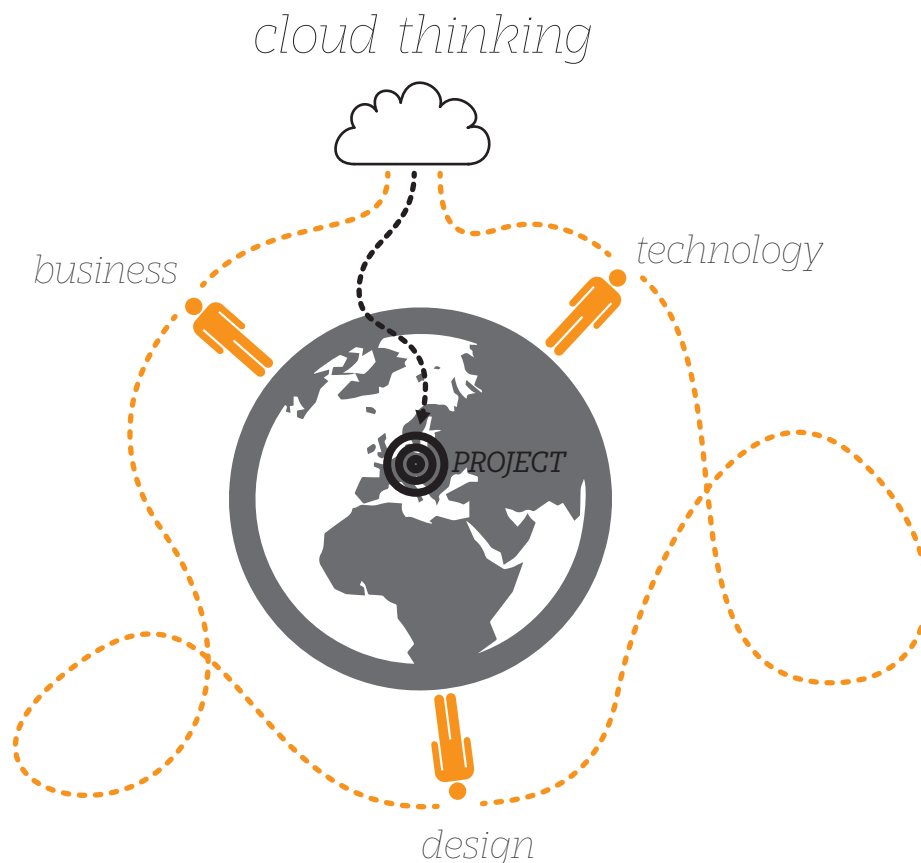
design

2. BACKGROUND

2.1 ROUND ONE

Created by Sinan Mihelčič and Derek Ouyang, the pilot Round One in 2012 was called Global Urban Design Course (GUDC) and involved two teams of students from Stanford University and Ljubljana University studying architectural design, economics, urban studies, and business. It was based primarily off of their experiences in Stanford University's PBL[1] Lab's award-winning course titled AEC[2] Global Teamwork Project. The students were placed in mixed interdisciplinary teams and developed proposals for hypothetical university campuses in New York City and Hong Kong. The course focused on training the students in remote collaboration, urban research and design, matrix-based decision making, and integrated project delivery. This first iteration of GUDC won first place in the 2013 Student Business Conference hosted by the Faculty of Economics in Ljubljana.

Number of participating students	10
Number of participating mentors	20
Total number of weeks	17
Estimated total number of man-hours	850

1 Project Based Learning
2 The Computer Integrated Architecture/Engineering/Construction

2.2 LESSONS LEARNED

Throughout Round One, the leadership team engaged all participants in feedback surveys and gained insights into what aspects of the academic exercise were successful and which could be improved. Through a rigorous structure of meetings and deliverables, students improved their overall skills in digital tools and teamwork and learned to think through problems from new perspectives. One of the teams experienced a strong sense of synchronicity and enthusiasm, while the other experienced a drop in motivation and interdependency, exemplifying the effect team dynamics have on overall project success. Both teams acknowledged the importance of effective communication and responsibility sharing to be able to coordinate work across different time zones, especially when approaching a deliverable. Almost all students wished for more engagement with professional mentors and more overall time on their projects.

GUDC won first prize at 2013 Student Business Conference in Ljubljana.

2.3 CLOUD ARCHITECTURE

In the spring of 2014, Mihelčič and Ouyang established the founding principles for a new architectural practice called Cloud Architecture. This new model of studio will be a global team of architects that utilize virtual collaboration tools and research-based theory to tackle urban and architecture challenges all around the world. By sending a small field team to set up a mobile, POP-UP studio directly on each challenge site, Cloud Architecture transforms a traditionally insular and exclusive process of design into a collaborative and inclusive one. Not only that, by incorporating the latest cloud-based tools, the studio can resourcefully engage an entire global community of design experts in local challenges with the ease and efficiency of co-located practice. The practice will begin primarily as a collaboration of young professionals from Stanford University and Skupina Štajn in Slovenia but will grow to incorporate more members from around the globe.
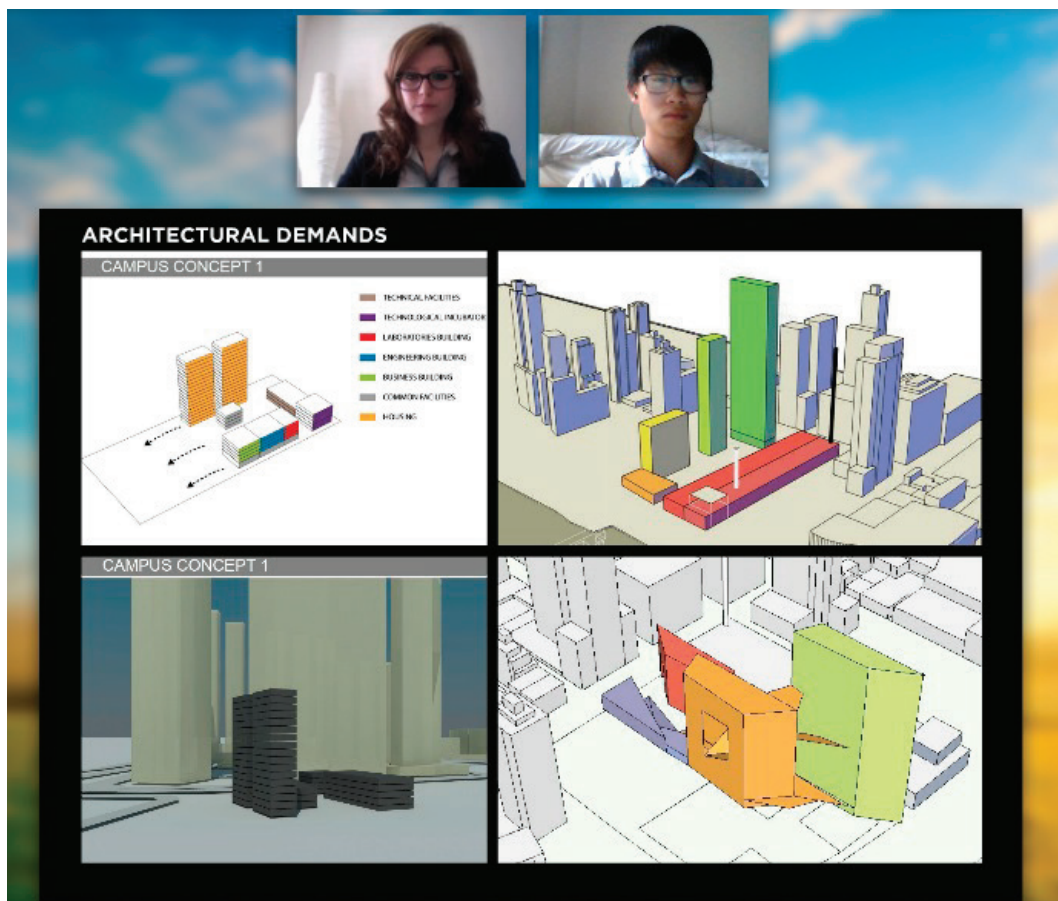
Example of online collaborative working environment used in GUDC 2012 and in Cloud Architecture.

3. ROUND TWO

3.1 INTRO

Under the umbrella of the new Cloud Architecture brand, the Global Urban Design Course will transform into a professional research arm developing new tools and methodologies in urban planning and architecture for future projects. GUDC will become less course-oriented and take on a more hands-on, extracurricular approach, emphasizing a high-quality research and design process, professional online digital teamwork and mentorship, and implementable results. Expectations for participating students in terms of skill level and time commitment will increase, and they will undergo a transformation into young professionals through the project's demanding structure and real-world implications. For these reasons, we rebranded GUDC into the Global Urban Development Program, GUDP.

Combining the best practices from Round One and Cloud Architecture, Round Two will engage real companies from various industries and continents who are interested in working with the research group to gain valuable insights into their future developments at little to no cost. The student teams will conduct research on overarching urban trends and design principles and then apply their proposed ideas and tools to a specific development problem proposed by the client. Stanford and Ljubljana University will continue to be involved, along with additional partners. A stronger mentorship community will be emphasized, and some will act as leads or clients for the project teams. Possible focus areas in this round include renovation and transformation of old industrial or commercial zones, gentrification of problematic residential areas, and corporate development and expansion.

Economics/business			
Politics science / social science			
Architecture design			
Urban design and Urban planning			
		Management	
	Engineers	Engineering / energy	
		Construction engineer	
	Marketing, PR		
		Lifespan management	

start of a program · mid term (end of research phase) · End presentation
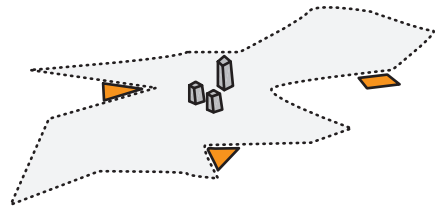
3.2 TIMELINE

1.
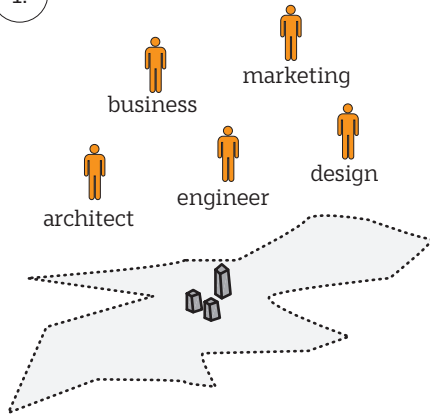
OCTOBER 2014
Kickoff milestone, teams will meet with clients to set up research objective.
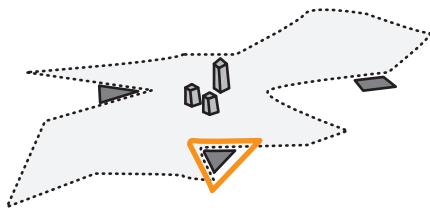
2.

NOVEMBER 2014
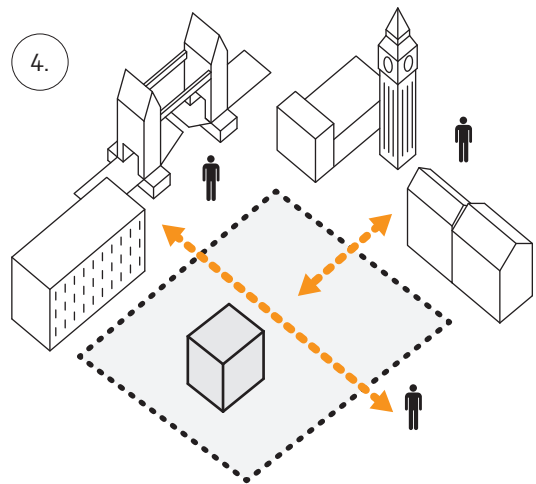Students will conduct preliminary research based on the urban challenge.
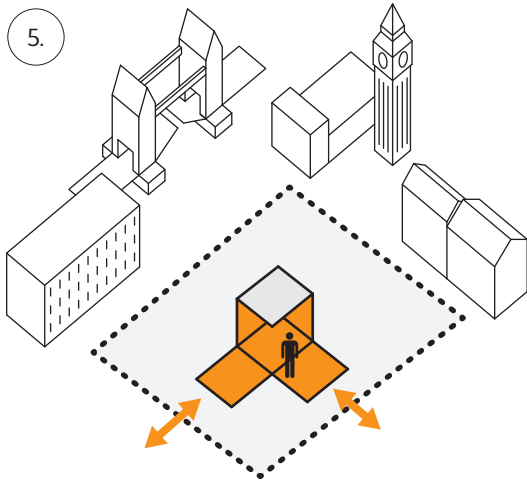
3.

DECEMBER + JANUARY 2015
Midpoint milestone, teams will present their research findings to clients.
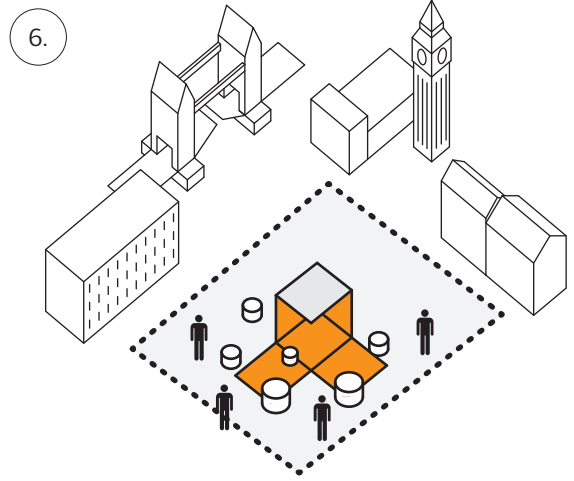
4.

FEBRUARY 2015
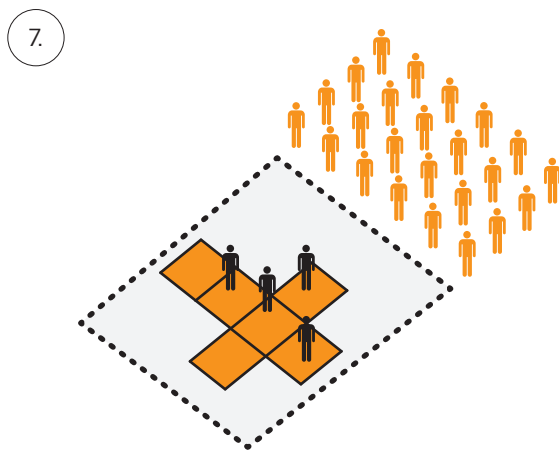Students will begin applying research principles to specific design problem.

MARCH 2015
Students will work on the conceptual design for their proposed solution.

APRIL 2015
Students will work on the design development for their proposed solution.

MAY 2015
Final milestone, teams will present their proposed solution to clients.

3.3 TEAM

Sinan Mihelčič, age 31, graduated from Ljubljana University in Architectural Design. He participated in the AEC Global Teamwork Project in 2011 and co-created the Global Urban Design Course in 2012, both exploring digital collaboration tools in urban planning and architectural design. He established Skupina Štajn in 2008, an emerging young architectural studio in Kamnik, Slovenia. He is a technical assistant in architectural and urban planning studios at the Faculty of Architecture in Ljubljana, as well as a mentor to the AEC class at Stanford.
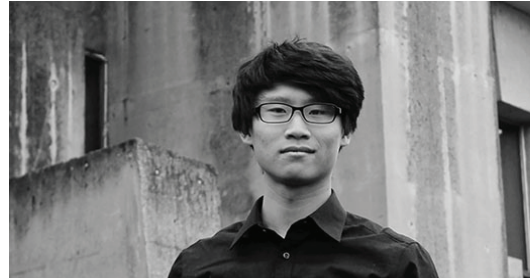
Derek Ouyang, age 22, graduated from Stanford University in 2013 with dual Bachelor's in Civil Engineering and Architectural Design, and will return in the fall for a Master's in Structural Engineering. He participated in the AEC Global Teamwork Project in 2011 and co-created the Global Urban Design Course in 2012. He was project manager of Stanford's first-ever entry to the U.S. DOE's 2013 Solar Decathlon and has been featured as an up-and-coming architect in the *Los Angeles Times*, in *Home Energy* magazine's "30 under 30", and at TEDxStanford.

Janž Omerzu, age 25, is a fifth-year student at the Faculty of Architecture in Ljubljana. He participated in the AEC Global Teamwork Project at Stanford in 2012, as well as an interdisciplinary Erasmus workshop in Krakow that focused on revitalization of old industrial areas in southern Poland. He was awarded 1st prize in a student competition that focused on pop-up architecture out of 45 competition entries. He currently works as a technical assistant at the Faculty of Architecture and as an intern architect at the Slovenian architectural office of SADAR + VUGA.

Klemen Kušar, age 28, graduated from Ljubljana University in 2012 in Architectural design and in 2013 in Economics. In 2010 he was an exchange student at Aalborg University and attended a summer workshop for the renewal of favela Dona Marta in Rio de Janeiro. He participated in the Global Urban Design Course in 2012. In 2008 and 2010 he was awarded 1st and 2nd place in the Isover Multi-Comfort House Design, and in 2012 was awarded the University of Ljubljana Prešeren Prize for his master thesis about public participation in the process of gentrification of urban sprawl. He is author of several articles regarding this matter.

4. CALL FOR PARTICIPANTS

4.1 PROFESSIONAL PARTNERS

In order for this project round to be successful, we are seeking support from professional partners who find value in our research methodology and would like to collaborate on the eight-month process. There are many ways to get involved, and we have categorized our support bases into the following categories: project clients, sponsors, tech support, mentors, and university partners. The more support we receive, the more simultaneous and synergistic projects we can run.

PROJECT CLIENTS

We are looking for companies with urban real estate, development, or design challenges that would be interested in receiving a student team to conduct research and design for them at little to no cost. The students will gain valuable experience through working with professionals, and the participating clients from the company will gain valuable insights into their business. The organizing team will work with potential clients to determine a project of appropriate scope and mediate the collaborative process. Final proposed design solutions will be presented to the client for future study and possible implementation.

SPONSORS

We are looking for funds primarily to accommodate any traveling needs of students, mentors, and clients as determined by each project. Sponsorship may be connected to marketing opportunities with participating students and partners.

TECH SUPPORT

We are looking for software companies that are working on digital collaboration and visualization tools that relate to our virtual research and design process to use our project as a testbed for their products. Possible tools we'd like to test include cloud storage and rendering platforms, virtual/augmented reality environments, building information modeling programs, energy analysis software, social media, graphics programs, and more. Feedback on the product experience will be documented by the teams and presented back to the companies.

MENTORS

We are looking for mentors from various disciplines to support the student teams in specific learning goals related to urban planning, real estate development, architectural design, engineering, construction, public relations, teamwork, etc. Mentors may be paired with specific teams or be available consultants to all projects. The organizing team will coordinate with each mentor candidate prior to the project to determine an appropriate level of commitment.

UNIVERSITY PARTNERS

We are looking for academic institutions to partner with as a channel for recruiting student participants. Individual institutions may determine the level to which the project integrates with a student's curriculum (e.g. independent study units) and the level to which they promote the project within the student body. Individual faculty members can also act as mentors to the participating students.

Univerza *v Ljubljani*

Skupina **Stajn**

bau
bureau for architecture and urbanism

CLOUD
ARCHITECTURE

4.2 CONTACT

Please contact us if you would like to collaborate with our team on Round Two of the Global Urban Development Program.

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