

Best Practice - Georgia Tech Housing on-line
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Abstract

The Georgia Tech Department of Housing partnered with the Office of Information Technology, Enterprise Information Systems (OIT-EIS) to develop a custom web-based room assignment process to serve 4,800 returning residents.

Before residents could apply for housing, a \$600 deposit was required or a financial aid deferment could be granted. At log-in, the application automatically checked the student's Institute Bursar account to confirm deposit, and if not, it checked the financial aid status to determine if the student was eligible for a deferment.

Due to a shortage of housing, only 2,000 rising sophomores were guaranteed housing. As guaranteed students, these rising sophomores were automatically assigned a space based on submitted preferences and accepted their binding Housing contract on-line, completing the application process in one simple step. The remaining returning students participated in a lottery, determining whether they would select a room or be placed on a waiting list.

The on-line process created a wait list that was automatically updated as assignments were made and that allowed the applicants to check their position at any time. As assignments were made from this wait list, an email was generated to inform the applicants and direct them to the web site to accept their on-line Housing contract.

Introduction of the Organization

The Georgia Institute of Technology is a public research university with 330 acres in midtown Atlanta, a campus in Lorraine, France and a regional engineering program in southeast Georgia. With more than 700 full-time instructional faculty and a fall 2002 enrollment of 16,480, undergraduate and graduate students receive a focused, technologically based education.

Undergraduate and graduate degrees are offered in the Colleges of Architecture, Engineering, Sciences, Computing, Management, and the Ivan Allen College of Liberal Arts. Students learn from world-class teachers and scholars working at the frontiers of science and technology. Georgia Tech researchers are developing new vaccines and cures for diseases; designing sophisticated new prosthetic limbs for land mine victims; studying development and transportation patterns to improve regional air quality; and providing policy leadership to reduce the global threat posed by weapons of mass destruction.

The Institute consistently ranks among *U.S. News & World Report's* top ten public universities in the United States. In a world that increasingly turns to technology for solutions, Georgia Tech is using innovative teaching and advanced research to define the technological university of the 21st century.

The university is a national and international leader in scientific and technological research and education, receiving more than \$237 million in research awards in fiscal 2001. In 2001, Georgia Tech helped attract more than \$41.8 million in new capital investment and helped create or save 662 jobs statewide.

The Georgia Tech mascot is Buzz (yellow jacket) and the official school colors are white and gold.

Statement of the Problem/Initiative

More students want to live on the Georgia Tech campus than Housing has beds to offer. Also, international and out of state students sometimes receive correspondence late and sometimes their return correspondence arrives late.

A faster contract acceptance program would allow Housing to determine if there were more beds to offer and would also prevent Housing from distributing beds that international or out of state students planned to accept but correspondence arrived late.

Design

One major goal on the Department of Housing strategic plan was to create a truly web-based (on-line) room application and assignment process. Any solution required interfacing with Banner (Georgia Tech's student management software) and RMS (room management software).

The goals of this new design were to provide a faster, more efficient, and accessible process for Georgia Tech students, while providing increased efficiency for the Department's Assignments staff.

Prioritizing this planning goal, we then sought to garner early support and input from other campus agencies that would be affected (and possibly benefited) by such a new process. These offices included Bursar, Admissions, Financial Aid and Registrar.

Once each office approved their component of the process, we formally approached the Office of Information Technology (OIT) Enterprise Information Systems (EIS) group. OIT-EIS has already created numerous successful on-line applications.

OIT-EIS worked hard to make the application utilize existing Housing and Georgia Tech administrative systems (hardware and software).

The greatest expense was in staff time devoted to the various development tasks:

- planning meetings
- creating highly detailed flow charts and test scenarios
- testing during each phase
- collaboration with programming team, as required

By partnering with the major campus departments and the potential impact of the application, the project became an Institute priority and was developed in house by OIT-EIS at no cost to the Department of Housing.

Further, it was determined that a three-year development plan would ultimately be necessary to achieve all of our goals.

To be useful for fall 2002 room selection, the application had to be complete by February 2002. The first of ultimately a three-part process began in early September 2001. The result was a five-phase application, including:

- applying
- depositing
- contracting
- lottery
- room/roommate preferences
- room selection
- status/room assignment

Implementation

The Department of Housing Assignments staff developed flow charts of each phase of the room application process using Visio (software). These were based upon

long-standing “priority policies” dictating how room assignments were made. Ultimately this process resulted in 105 “distinct “scenarios (rising sophomore male student in suite, junior female athlete in apartment, etc.).

With these 105 requirements laid before them, OIT-EIS made time estimates for each of the five phases and created a time-line within our deadline.

Within each phase, time was allotted for programming as well as verification testing. Weekly meetings were held between OIT and Housing to answer programmers’ questions and to ensure all deadlines were met.

At the end of the project, Assignments front office staff and student leaders tested the process thoroughly. This enabled us to see first-hand how users interacted with the application, make refinements, and build needed confidence among staff and a student body known to be skeptical of change.

Benefits

Two measurements of student satisfaction with the changes are the dramatic decrease in telephone and email inquiries about housing status, and the elimination of two required room selection nights.

The Department of Housing realized both financial and labor savings by eliminating the mailing and filing of 4,800 contracts and the freeing of staff time from answering repeated telephone questions about housing status.

Retrospect

This first project (year one) was devoted to “Returning Students,” those residents currently living at Georgia Tech and desiring to do so the following year. The second

project (year two) will focus on “New and Transfer Students,” followed by Summer Students.

Due to time constraints and technical issues, we were unable to create the mechanism for students to specifically pay the housing pre-payment on-line. Currently, students were required to pay their deposit to their general student account and then the Bursar’s Office would manually “move” those payments to the housing deposit table. This table is where the on-line application “verifies” the payment.

Due to the potential time savings to the Bursar’s Office and the sheer number of students affected, this project has been given a high Institute priority and will be operational for the coming Returning Student Room Application Process.