



## User Testing Report

After extensive user testing, we have found that though the game is not perfect, its stability is very good and its usability is also good. All the functionality is present, there are just a few details that could be more user-friendly. Although there are many things that would be great to implement and adjust in the next version, none of the problems would prevent users from playing the game and having a good time.

### **Bugs Found & Changes Made**

These are the bugs that were found through testing and fixed - all the parts that were improved upon in the current version. This includes the most serious shortcomings and things integral to playing the game.

- ♦ Seg Faults - although these events may still exist in rare cases, they have been improved upon greatly and virtually eliminated.

Sometimes when you pause upon opening a new game

Sometimes after you load games many times and/or many things are done at the same time.

- ♦ GPA could rise past 4.0
- ♦ Couldn't find out the dorm capacity to know when you need to build more dorms
- ♦ Newspaper alert messages were unclear as to what needed to be fixed
- ♦ When you loaded and began new games, a lot of confusing and slow sounds were played
- ♦ Professors' likeability scale was unclear - had to add verbal descriptions
- ♦ Alumni donations were too high

- ◆ Professors available for hire didn't have increasingly high rankings as the school gained prestige
- ◆ Dorm selection option needed clearer label
- ◆ GUI windows needed more specific titles
- ◆ When bulldozing roads near buildings, it thought user wanted to bulldoze the building
- ◆ Students could get stuck inside buildings that were built on top of them
- ◆ Props (bushes & fountains) could be built on buildings and outside the map
- ◆ On load game professor salaries and maintenance fees were double the correct values
- ◆ There was no way to unsubscribe to the news
- ◆ Buttons and Statistics functions in GUI were not labeled
- ◆ Names of GUI windows were unclear

## **User Testing Method**

Every feature in the game has been tested extensively by the user tester and other group members, as well as stress testing consisting of using large games and many operations. In addition to the testing of the group members, there were 5 other users that came in to test out SimsU. They began with a new game and were asked to play on their own. I took notes on what worked and what didn't and what they found easy to use and what was confusing. As they asked questions and needed help, I told them how to play, all of which information could have been found in the User Guide had they had more time to read through it. They tested out each feature and played the game for a while and at the end were asked for their overall comments on the game.

## **Usability Results**

Usability varied greatly in proportion to whether users had previously played a SimCity type game. Users that had played one before found the game controls and game flow very intuitive. Users that had never played before on the other hand were often confused about what they should do, how to begin, and what their goal was. This is to be expected, and not the fault of SimsU, since new users will inevitably have to spend some time reading the User Manual and getting the feel for the game.

Users all found the game logic slightly confusing - they weren't sure what they should build to make a successful university. The result of this was usually that the user ran out of money very quickly and then was stuck with a university no one wanted to attend. This is also to be expected, since the idea of the game is to figure those things out by experimenting over time. Since not all SimsU players have the time for this however, we have included that information in the Hints section of the User Guide. Some users were also frustrated with the frequency of earthquakes and the general difficulty of the game, but no one said running a university was easy!

Some parts of the GUI were fairly unintuitive for all users. One of these things is how to get rid of the newspapers when they suddenly pop up. Also users could not figure out how to use the viewing controls (zoom, pan, rotate) on their own, and once they were taught they still had a hard time using them effectively. In addition, though the control buttons on the right have informative icons, this was not enough for most people to figure out what they were for or even to remember after they were showed. Though all of these things are explained fully in the User Guide, a later version of SimsU should take these factors into account and make the environment more user-friendly and intuitive.

## **Recommendations**

**These are the things that should be high priority to get fixed in the next version:**

- ◆ Should need to have at least one professor before anyone will enroll
- ◆ When the game is paused, you should not be able to build anything, or at least money should be deducted right away
- ◆ When you zoom in on a building, you shouldn't be able to go so far that you can go through the walls and roof and see inside
- ◆ Should be able to close a newspaper window when another window is open
- ◆ Response time of button presses should be faster
- ◆ Enrollment starts at 10 even though there are no dorms or professors
- ◆ There should not be a GPA shown when there are no students

**These are other observations made that could be improved upon but that are not crucial to game play:**

- ◆ Buildings' alignment should be able to be rotated

- ◆ A list of all the buildings on campus should be available with the total enrollment and dorm capacities
- ◆ User should be able to choose from various terrains to start the game with
- ◆ After earthquakes you should be notified as to what buildings you lost and what the damage was
- ◆ When load a game, starting a new game, and quitting, user should be asked if they want to save the current game
- ◆ Roads should be able to be built in strips instead of just one square at a time
- ◆ How to get rid of newspapers when they pop up should be more clear
- ◆ When scrolling through professor list to fire them, the cursor should not go back to the top
- ◆ Building selection window should be able to stay open while you build buildings to make buildings multiple things at once more convenient
- ◆ When user can't build things because of lack of funds, the reason should be made more clear
- ◆ In the building selection window, how to select a building should be more clear
- ◆ GUI is too big for some OS setups and should fit in all