Yu Gu

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Last Supper

Posted on July 31, 2015 by nancygu

So we are finally done with our presentation and pretty much everything about our project. Personally I feel like our group did fairly well in presenting our results. And there were some very interesting projects out there from other REU groups.

It feels extremely awkward that this is probably our last blog post. At the beginning of the program I thought ten weeks was so long and it would take forever, but now I can only say it was like a blink of an eye. I feel mixed emotions about going back home, because time spent in Iowa was truly fulfilling and memorable. I hope that our team can still remain in contact after this program ends, and that might turn out to be true since our faculty advisors would like us to continue working on the interface during fall semester to adapt to future needs of the study.

Tonight we are going to Hickory Park for barbeque, and that will be our "Last Supper" in Iowa.

Blog after midnight, hope it counts for the previous day

Posted on July 28, 2015 by nancygu

Oops I forgot to blog this afternoon because I was working on our project. Last Friday was a lot of fun. We went to the hot balloon festival, and they were absolutely impressive. I loved the pirate and the monkey hot balloons though they did not go into the sky in the end. We took a lot of funny pictures.

Weekend was relaxing for me since I did not go to paintball. I bet it would be fun, but at the same time it definitely will hurt, especially when I don't have baggy pants or any old clothes to trash.

We just came back from bowling. Maggie, Mak, and Justin got some pretty good scores. The rest of us still did pretty well too. Gabe performed really well during the second game and got the highest score ever, which was a contrast to his first game lol.

Wednesday was a fried egg

Posted on July 23, 2015 by nancygu

Last night Allie and I experimented on an egg. Neither of us has made a fried egg before, so it was the first time that we cooperated to successfully create an edible fried egg. The process was pretty interesting, but it was a little awkward at the same time because both of us simply stared at the egg and neither of us knew what to do. But we managed to make one without destroying it, and it was edible. Surprisingly, when Jordan came back, she immediately smelled egg in the air, which I was sure that there wasn't

any scent remained.

Today we had a nice discussion about cats.

Alligators

Posted on July 22, 2015 by nancygu

Tuesday night we stayed up in VRAC and finally decided that we would use one of the computers in VRAC with Windows 7 to test our participants. This morning we had two participants, Mak and Gabe. We collected their data with no problem, and in the afternoon we are running more trials.

During lunch we sat with a few graduate students and talked to them. Justin mentioned there are alligators in his college, and I have so many questions about them. I couldn't understand why he only saw alligators only twice in three years, and that he hadn't heard of any incidents. Maybe it's because students are not allowed to feed the alligators.

Last week

Posted on July 20, 2015 by nancygu

So I realized I haven't been blogging for a week. Last week was totally a hot mess for our group with all the homework for craft of research and drafts due plus fixing our interface and preparing for journal club.
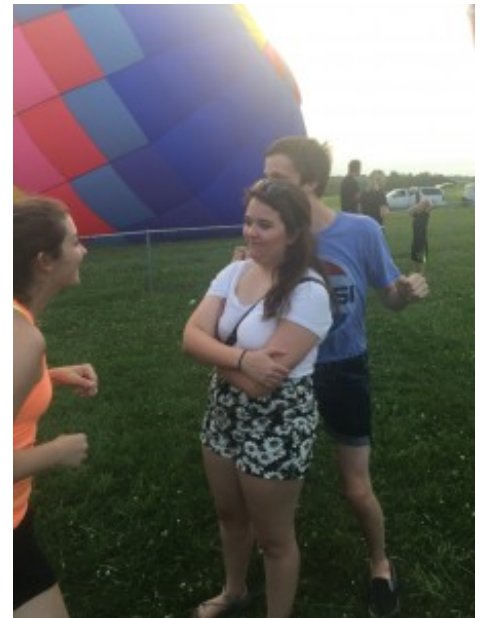
Not a lot happened on Tuesday. We were just overwhelmed by the amount of work we had, including preparing for mid-summer presentation and altering our interface based on Dr. Sweet's advice during research meeting.

Wednesday was interesting. We finally had our mid-summer presentation. I think my team presented fairly well besides messing up the video part and the coincidence that the clicker malfunctioned. The other teams also did a great job presenting their projects. We definitely behaved with professionalism. I also liked some of the research relating to machine learning, artificial intelligence, and neural network the other group was presenting.

On the way home, Alex broke his umbrella by spinning it around his finger and causing its head to fall off. In the photo he had half of his umbrella in his hand and the other half on the ground.

We finished our presentation slide for Journal Club on Wednesday night and after that we went to Cold Stone for ice-cream on Sarah's request. I liked the Oreo shake there, though I would prefer Oreo frappe at the library.

Our group didn't accomplish much on Thursday even though we tried hard to focus on the work. At night we went to the camping place where Amy was staying and had s'mores. There was a lake around it, and we got into water for a little bit. Unfortunately I wasn't in my swimming suit and David dunked me into the water. The s'mores were really good, and we heard some funny stories. The only tragedy was that I had more than thirty mosquito bites.

Science museum on Friday was pretty cool. It was the first time that I bought and had a rock candy. And jeez it took forever to finish. The candy was simply too large; it was definitely the size of several lollipops. In the afternoon we presented for the Journal Club. Desmond totally surprised us by making us present each other's slides, which we did not rehearse for. Sarah was lucky enough to get her own slides, but it was definitely a struggle for Alex and me to present some of her slides and each other's slides.

Not much happened during weekend. I did not go to the lake with the rest of the group because I didn't feel like getting into the lake water again. I had some relaxing time at home and stayed up a little bit.

Today we finally got our IRB approved, and I am obliged to get the interface done before 4:30. Starting from tomorrow or Wednesday we can start to recruit participants and get some real data. Hopefully by the end of the program we would have some significant results.

The first day of the last three weeks

Posted on July 13, 2015 by nancygu

Mall of America last weekend was super fun. I absolutely enjoyed the roller coaster. It was pretty funny that our group started screaming when the roller coaster was slowing climbing up. I believed that we screamed louder than the kindergarten / elementary school kids who went on the roller coaster before us. After visiting the amusement part we went to many stores and they were amazing, but there were even more stores that we didn't have time to visit. Although I know it's impossible, I wish we could stay there for three or five days and fully explore the entire mall.

Sunday was a little miserable for my group because we had to work 5:15 – 7:20pm and go to VRAC from 7:20 pm to 11:35 pm. We absolutely enjoyed working on our project, but coding on a Sunday night was not as fun as one would imagine. Today we figured out that our IRB was received but then lost so we wouldn't be able to do the experiment in at least two weeks. I guess we can use this time to make our interface perfect.
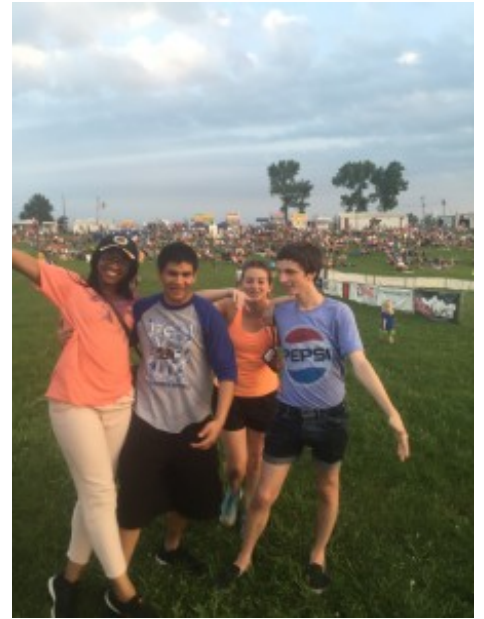
@_@??

Posted on July 10, 2015 by nancygu

Dr. Sweet checked out our interface yesterday and gave us a lot of advice on how to modify it. Alex and I stayed until midnight last night at VRAC to upgrade our interface. It was pretty nice that we accomplished a lot with these extra hours of coding so that we don't need to come to VRAC on Sunday. And we were glad that we got into the apartment with no problems (we were locked out once).

I am so excited for going to the Mall of America tomorrow. The roller coasters will be so much fun. I don't know if we should ride the roller coasters first or go shopping first. Either way it seems like tomorrow will be a busy day.

blog

Posted on July 8, 2015 by nancygu

Feel like I haven't blogged for a long time, but it was actually just one day. Our group is spending a large chunk of time finishing our interface now. We stayed until 9:45 and 6:45 for Monday and Tuesday. Fortunately we had accomplished a lot with this extra work. The only tasks remained for our interface are for Alex to make it "prettier and more prettier" (according to Alex), and to come up with a name for our software. I hope we will be able to settle everything this afternoon so that we don't need to stay at VRAC until much later tonight.

short post

Posted on July 6, 2015 by nancygu

We had a three-day weekend for the Fourth of July. It was pretty much the most relaxing weekend I have ever had since I came to Iowa. On Saturday we went to Des Moines. Since it was Fourth of July, only few shops opened, but fortunately I was still able to find a birthday gift for my father. This morning I saw the bro tank, and there was a cat picture on it. I love it a lot! The rain was brutal today, and I hope the weather won't be too bad tonight since my group is probably going to stay at VRAC until 11 to work on our project.

0 / 0 = sassiness

Posted on July 1, 2015 by nancygu

Anyone who hasn't try it yet should ask Siri what's zero divided by zero!!

For the previous few days, my teammate and I were buried in thousands of lines of code. We managed to survive somehow and built a half-complete user interface for our project.

Our short-term goal is to finish building this interface by this Sunday. Although we might need to spend time during this weekend working on it, I think it should be worth it.
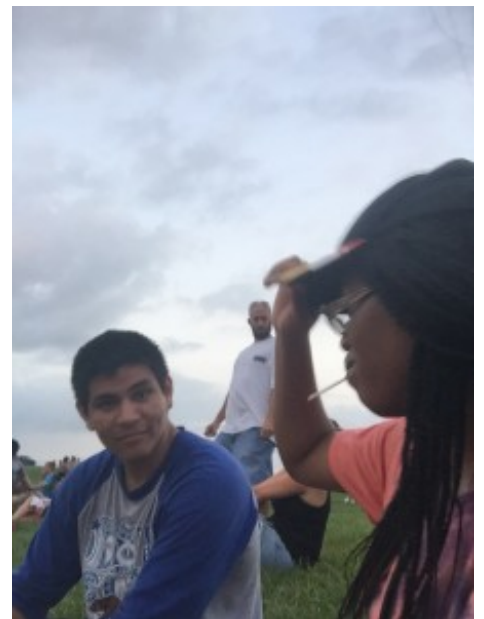
"Interesting" title

Posted on June 29, 2015 by nancygu

Last weekend we went to farmers' market and art festival in Des Moines. There were so many cute dogs at the farmers' market!! We took some awesome and funny pictures at these two places. We had lunch at Desmond's colleague's house, and we played volleyball together. The ball bounced onto the ceiling of the house and knocked Maya's food plate onto the ground lol.

This morning we arrived at VRAC and saw that our models got 3D-printed. Here's our cell phone charger station. It was basically working, though the material for the station was a little fragile so we were scared that my iPhone 6 plus would break it apart.

werkwerkwerk

This is not a great graph. All numbers are printed on the graph, and the readers have difficulties reading these numbers whatsoever. The graph isn't organized in any way, so even if readers ignore all the numbers, it still takes a lot of efforts just simply to find and compare the height of different columns. The title of the graph doesn't say much, and without reading the content of the article, readers are not clear what the graph means. It takes at least two minutes to fully understand this graph, which signifies it probably isn't a great one.

User_HCI: This isn't it. Please look for Justin's post.

I realized today that my computer at VRAC had not been able to connect to network services for two days, so now I cannot really access Internet or any networks drives on my desktop. Fortunately I brought my laptop with me, and I guess I will have to rely on it until at least next Monday.

No one was wearing bro tank today even though it was a Thursday.

:)

Unfortunately Maya on my computer crashed today and I lost all of my work. I was not the only one who had this issue, and I had no idea where it came from. But hopefully it would be fixed soon.

We had taco for luncheon lecture. Mak was super excited about "Taco Tuesday". The speaker was Caroline Hayes. Her experience shifting from artificial intelligence to human computer interaction was interesting to me since I am interested in AI, especially machine learning.
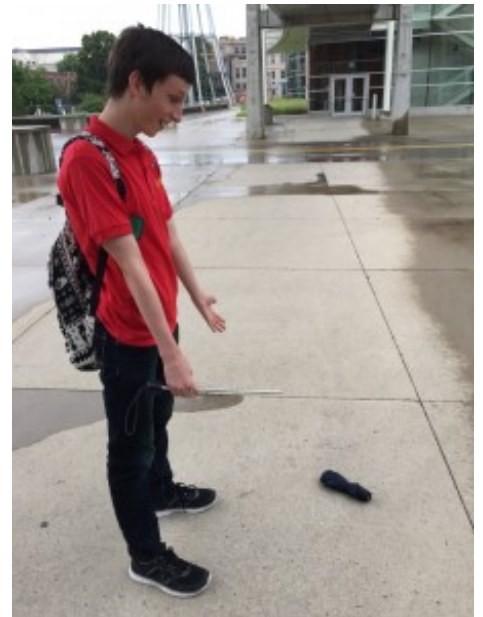
This afternoon my group will probably finalize the structure of our project, so hopefully we will be able to wipe out everything on the whiteboard and start coding.

Late post

During the weekend we went tubing on Saturday, and my group spent a few hours on Sunday to work on the roller coaster project.

I should admit that we started on this project a little late because we had to work on the research project at the same time. Everyone got a little frustrated after debugging for the same error for four hours, but fortunately we eventually made progress and made the path following the track of the roller coaster.

This was a fun project and personally I would like to spend more time on it in the future to improve the transition between curves of the roller coaster.

InterfaceHCI

Posted on June 18, 2015 by nancygu

Task: buffer between the burning cup of coffee/tea and your hand

Context: used by all coffee / tea drinkers in daily life

Working: correct size to go with the cup, cheap, block majority of heat, and have enough friction for people to grab.

Not working: advertisement on it "Life is short. Stay awake for it." Is a little depressing. It's not reusable, and the material is not very ecological.

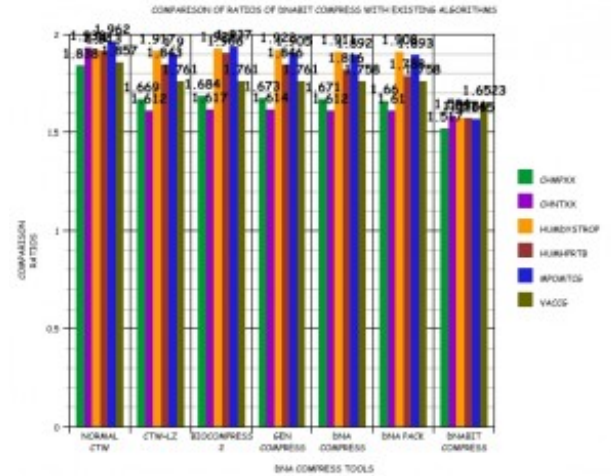Improvement: positive advertisement and more environmental material.

Interaction principles:

Design value: the design fits both the 12oz and the 16oz cup pretty well. The interior straps increase the friction between the cup and itself. Free advertisement on the cup for the café. Not very pretty, but very pragmatic.

Conceptual principles: Provides convenience for coffee / tea drinkers by preventing them from being burnt from fresh drinks.

Behavioral principles: stay stationary on the cup as if it is part of the cup.

Interface-level principles: the shape is the same as the cup so it is intuitive for users to put it on the cup.

Task: lid for the coffee / tea cup

Context: used by all coffee / tea drinkers in daily life

Working: effectively seal the cup to prevent the drink from general spilling and allow people to drink from the cup directly at the same time.

Not working: sometimes people can still tilt the cup and spill the coffee / tea. Plus the lid get sticky when people drink from it.

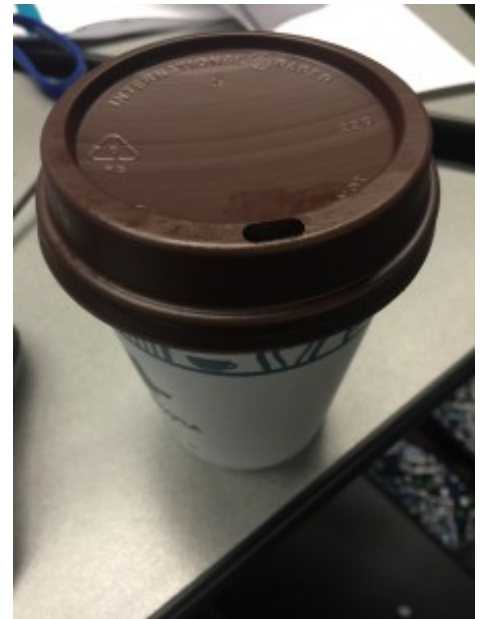Improvement: allow opening and closing of the lid itself

Interaction principles:

Design values: enough friction to seal the cup, low price and biodegradable material

Conceptual principles: it should allow people to drink from the cup directly but prevent major spilling

Behavioral principles: it should stay stationary on the cup when people are nt intending to open it

Interface-level principles: the hole there indicates that you can drink from it. People need force to take off the lid which suggest they shouldn't take it off.

Look at the whiteboard

Posted on June 18, 2015 by nancygu

If you turn around you will see all the function titles on the whiteboard, and Alex and I are very proud of our collective work to make the whiteboard "pretty" and meaningful.

Yesterday afternoon we worked on organizing the classes of our program and most of the functions associated with our user interface and controller. We still have to decide the information part of our program today or tomorrow. However, we are having a schedule conflict since we are also trying to build the roller coaster project. I can predict that I won't get any break this weekend.

It is kinda sad that no one besides Desmond wears bro tank this Thursday.

^_^

Posted on June 17, 2015 by nancygu

Yesterday I received my HP team challenge task, which is inserting random "Meow" in my conversations with other interns. I think I completed my task pretty well :P.

After the luncheon lecture was the research team meeting, and our team split into subgroups to discuss different parts of the project we were working on. Sarah worked with Dr. Sweet to go over IRB, Alex talked to Rafael about computer vision and body tracking algorithm, and I discussed with Adam about the controller and the class structure of our project.

Unfortunately we would not be able to apply body recognition algorithm to our project because the videos we will be

using were not shot from stationary video cameras so it would be impossible to detect the actors in motion since the background is in motion as well.

This morning we decided that our final project for OpenGL would be roller coaster. It would be a challenge for us, but it would be fun!

I Love Cats Three

Posted on June 12, 2015 by nancygu

Yesterday we were introduced to a few graduate students and we had dinner together at the Stomping Ground (don't mistake it to be a ground that people stomp on). They talked about their motivation to go to graduate school or ISU, their lives as graduate students, etc. Ben gave us a list of restaurants we should go to, but unfortunately I don't think I remember any of those any more.

This morning the weather looked miserable, but at least it was better than yesterday. We learned how to write resumes and CVs and talked about an article in the Journal Club. It was really crowded at lunch due to the orientation. I am considering the option of going to lunch at 1:30 if it will be like this everyday lol.

I love cats too

Posted on June 11, 2015 by nancygu

Yesterday Dr. Sweet took our group to see the eye-tracker. Although we finally decided that we would not use eye-tracker in our project, it was still great to see how it works. It was pretty similar to the eye-trackers we saw in UI/UX lab. Alex did the awareness test, and he claimed that he saw the moonwalking bear in the video. Unfortunately we could not load his data and verify his claim lol. Sarah was very enthusiastic about the eye-trackers here and discussed a lot with Jason, a staff at the eye-tracker lab, about the type and functions of the eye-trackers. It was 90 degree outside, so we all went to Caribou to get coffee after getting out of the lab. We didn't have anything scheduled during the afternoon, so I worked on writing some code for my project. It was always a fun time for me to do coding.

Posted on June 10, 2015 by nancygu

Last night we toured the planetarium. From 8 to 9 the staff at the planetarium showed us a computer simulation of the universe. The graph was projected onto the hemisphere-shaped ceiling so that it looked more three-dimensional. Stars of the same constellation can also be connected by lines or background pictures. I loved the simulation a lot, and I absolutely enjoyed the Greek stories about those constellations. We finally zoomed in on the simulation to Jupiter, and it was the first time I was told that a wind travels around Jupiter every 14 hours.

After it got dark, we went outside and saw some stars through the telescope. Although unfortunately there were some clouds, Jupiter and Venus were pretty bright, and we could even see the ring around Saturn through the telescope. I saw 13 stars and one airplane ▨ in total.

TGIF

Posted on June 5, 2015 by nancygu

Thank god it's Friday, but actually I don't have much to say about today. It passed like a normal day without any alien attacks. Light painting last night was a lot of fun. We had to work on a few pictures for several times, but all photos came out perfect eventually. Tonight we are going to attend the Ames Main Street ArtWalk. Hope that will be interesting.

First Day I Start to Know C++

Posted on June 4, 2015 by nancygu

This morning's C++ lecture touched upon memory and pointers. I was totally amazed by what how they work in C++ because it is way different from Java. In Java variables automatically store pointers to objects, while in C++ users have to create pointers themselves. After learning C++, Java, and Python, I have always thought that C++ and Java are very similar to each other. After this lecture, I realized that although Java and C++ have similar syntax, the way Java deals with memory is actually more similar to Python and other newer languages. I have always felt like to confidently say that I know a language, I should not only know the basic syntax and how to use its libraries, but also understand how it works behind the scene, for example, how it allocates its memory and how the complier compiles the program. This lecture made me feel like I really started to get to know C++ and helped me a lot with debugging.

Shortest post ever

Posted on June 3, 2015 by nancygu

We finally started on our final project today. Our project is War, and it is pretty easy to implement. So far we finished about a third of the project, and I am really looking forward to finishing the rest. So I will end this post now and get back to work. Hopefully we can finish most of it by the end of today.

Day 0b00001000

Posted on June 2, 2015 by nancygu

It was the first time that we were given a luncheon lecture today. The speaker was Dr. Stone, and he gave us some really helpful advice on graduate school, posters, and public speaking. I enjoyed his abroad stories a lot. In the afternoon we met up with our professors. Each member of my team presented his or her design of the user interface for our project. Although we were still not sure about some technicality and feasibility of some of our design, each of us helped improve the interface by offering our insights to the design. Next step would be to do more research and look for open-source code that can potentially help us deal with body parts recognition and motion tracking.

std::cout << "First C++ Class" << std::endl;

Posted on June 1, 2015 by nancygu

Today we officially started on taking mini classes about C++. Although we only started learning the basics of the language, I was still very excited to write code again. I look forward to writing our final project, which is supposed to be a challenging but fun one. It was the first time that I met my professor's dog today. She was absolutely a cutie, but I unfortunately scared her by running to her, and she scared me back in return by barking at me. Fortunately by the end of noon we were able to walk together peacefully. We will have a few hours of free time this afternoon to work with our teams, and my group is planning to sit outside and people-watch. Anyone who wants a break from studying feel free to join us.

Saturday

Posted on May 30, 2015 by nancygu

It's the first weekend since we arrived at Ames. Although it had been sunny and nice for the past few days, today it was surprisingly chilly and cloudy. In the morning all of us got up at 7:30 and visited the farmers' market. The best part of the trip was meeting two cats, one at The Loft and the other at the flowers' market. They were adorable, and I took so many pictures of them. There were plenty of good food at the farmers' market, and it seemed that everyone got something he or she wanted. In the afternoon a few of us spent two hours at gym and played basketball and

volleyball. It was great to work out.

Day 0b00000100

Posted on May 29, 2015 by nancygu

It isn't even 1:30 pm yet, so for me it feels a little weird that I am already blogging about my day. This morning we took the Myers Briggs test and received a tour of VRAC. This was the sixth time that I took this personality test, and not surprisingly I got a different result from my previous tests. So far I have received six different results, so maybe someday I will have all 16 on my collection. The tour of VRAC was super cool. Although this wasn't my first experience with virtual reality, it still impressed me a lot to see C6. It was such a rare opportunity to see how something that costs millions of dollars actually functions. I was also surprised when I was told that many algorithms used were open source, and one of the virtual reality world actually took only two and a half weeks to build since they do not have to build it from scratch. Even though I might not be able to understand them at the current stage, I am interested in finding these open-source projects online and looking into them.

Day #0b00000011: First Shade of Cardinal and Gold

Posted on May 28, 2015 by nancygu

Although three days have passed since I arrived in Ames, it's still hard to believe that I am spending an entire ten weeks here at ISU. Moving into a new place, meeting new roommates, teammates, mentors, and professors, figuring out a totally unfamiliar campus, and doing homework…I am living my freshman year again. So far I have had a great experience. I absolutely love the beautiful campus and the awesome people I have met here, and I am so pumped for my research project as well. I have to admit that this project is extremely interesting and the same time really challenging. There is no doubt that I need to learn a ton of things in order to work on this project, and I am very excited to do that. I feel like I am spending every single day meaningfully, and every night I look forward to the arrival of tomorrow and the activities tomorrow (probably not the programming test tomorrow). Tomorrow we are supposed to take Myers Briggs test. I am interested to see everyone's result.