MEETING AGENDA – WEEK 1

MEETING INFORMATION

Objective: Discuss VIP (the Vertically Integrated Projects Program)

Date:	08/26/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
    Steven Rowe
    Garrett Lemieux
    Joseph Casal
    Alan Nieto
    Lizette Mendoza
    Brenda Izquierdo
    Eric Aguiar
    Lukas Borges
    Christopher Naranjo
    Alex Sanchez
    Sean Iamartino
    Emmanuel Gonzalez
    Pierre Jimenez
    Tom Lam
    Tiago Moore
    Andrew Mitchell
    Jacob Leschen
    Lucas Iglesias
    Emmanuel Vinas
    Eduardo Guerra
    Luis Puche

PREPARATION FOR MEETING

ACTION ITEMS FROM PREVIOUS MEETING

AGENDA ITEMS

- Learn more about Product Owner

NEW ACTION ITEMS

- Prepare for meeting with Product Owner

MEETING MINUTES

- Room 112 available during 3:00 - 4:50 pm on Monday

Questions for project owner:
- What stage of the product are we in?   √
- What's FIU's role?   √
- What is the scope?   √
- Who are the users/audience?   √
- What level of information being handled? Sensitive/Non-Sensitive?   √
- What are we solving?   √
- Is this the administrative part of the project?   √(Yes)

Agenda for next meeting (Monday 8/31/15): Meet with product owner

MEETING AGENDA – WEEK 2

MEETING INFORMATION

Objective: Talk to Product Owner about VIP

Date:	08/31/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Lizette	Minute Taker:	Lizette

Attendees:
    Steven Rowe
    Garrett Lemieux
    Joseph Casal
    Alan Nieto
    Lizette Mendoza
    Brenda Izquierdo
    Eric Aguiar
    Lukas Borges
    Christopher Naranjo
    Alex Sanchez
    Sean Iamartino
    Emmanuel Gonzalez
    Pierre Jimenez
    Tom Lam
    Tiago Moore
    Andrew Mitchell
    Jacob Leschen
    Lucas Iglesias
    Emmanuel Vinas
    Eduardo Guerra
    Luis Puche

PREPARATION FOR MEETING

- Prepare to talk to Product Owner

ACTION ITEMS FROM PREVIOUS MEETING

- Come up with questions for Product Owner

AGENDA ITEMS

- Create relevant accounts for VIP Project
- Learn about Scrum

NEW ACTION ITEMS

- Prepare questions for Product Owner

MEETING MINUTES

- During class (8/31/2015) we created accounts in Mingle, Github, Slack.
- We saw a quick 10 minute video on Scrum and how it works.
- Talking about how to create FIU's VIP program
- Answering the questions we asked before previously on 8/26/2015
- First we create drafts in Google Docs, once everything is set, finalize them in Github/Mingle

MEETING AGENDA – WEEK 2

MEETING INFORMATION

Objective: Work on user story proposals

Date:	08/31/2015	Location:	PG6
Time:	1530	Meeting Type:	Group Meetings
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
    Steven Rowe
    Alan Nieto
    Tiago Moore
    Eduardo Guerra
    Garrett Lemieux
    Chris Naranjo
    Emmanuel Gonzalez
    Joseph Casal
    Eric Aguiar
    Pierre Jimenez
    Emmanuel Vinas
    Brenda Izquierdo
    Andrew Mitchell
    Lukas Borges
    Luis Puche
    Sean Iamartino

PREPARATION FOR MEETING

ACTION ITEMS FROM PREVIOUS MEETING

AGENDA ITEMS

- Discuss new user story proposals
- Brainstorm questions for product owner

NEW ACTION ITEMS

- Prepare more questions for product owner
- Develop user stories

MEETING MINUTES

Questions:
- How is the VIP relation with sponsors-Do we have any? Do we need to acquire them ?
- Do we already have an FIU VIP webpage?

- How are we going to recruit sponsors/students/faculty? - This will give us user stories
- How are the credits going to be evaluated?

-We shall create a platform with at least two parts, an administrative part and a user part.

SPRINT 1
What is the goal of this sprint?
-What does the team plan to accomplish by end of sprint 1?
Cover what we have discussed so far - help with generating information for the report

What is the acceptance criteria?

Hypothetical proposed Sprint 1 backlog

User Stories

As a [**user**] I want some [**feature**] so I can [**benefit**]

Undergraduate Student:
- As a student, I want to be able to apply to the program.
- As a student, I want to receive email updates from FIU VIP. (Lukas Borges)
- As a student, I want an online application to apply to project. (Steven Rowe)
- As a student, I want to be able to record my progress in the project. (Emmanuel Gonzalez)
- As a student, I want to be able to know what kinds of projects are available for me to join/contribute (A nice interface that will allow me to browse through the current projects and each project will highlight the topic and give
- As a student, I would like to receive emails from vip so that we can communicate better
- As a student, I want to receive constant feedback from a faculty member so I can improve my performance in the project. (Brenda Izquierdo)

PI:
- As a Pi, I want to be able to record my progress in the project. (Emmanuel Gonzalez)
- As a Pi, I want to be able to view all the students progress records.(Project Reports)
- As a Pi, I want an application to keep track of all financial transactions related to individual projects, so I can keep track of money spent and current project balance. (Garrett Lemieux)
- As a PI, I want to review applications so we can select the best candidates for the project

Faculty:
- As a faculty member, I want to be notified about project proposal deadlines. (Lizette Mendoza)
- As a faculty member, i want to be notified whether project proposal is accepted or declined. (Lizette Mendoza)
- As a faculty member, I want to be able to approve student who applied to project. (Lizette Mendoza)
- As a faculty member, I want to know the background (rank, major, previous projects, etc) of all the students who were approved for the project I lead so I can choose the students I want to work with. (Brenda Izquierdo)

MEETING AGENDA – WEEK 2

MEETING INFORMATION

Objective: Meet with Product Owner and discuss user stories

Date:	09/2/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
Alan Nieto
Steven Rowe
Andrew Mitchell
Lucas Iglesias
Lukas Borges
Garrett Lemieux
Chris Naranjo
Alex Sanchez
Jacob Leschen
Emmanuel Vinas
Joseph Casal
Eric Aguiar
Tom Lam
Lizette Mendoza
Emmanuel Gonzalez
Eduardo Guerra
Pierre Jimenez
Brenda Izquierdo
Sean Iamartino
Luis Puche

PREPARATION FOR MEETING

- Prepare more questions for product owner
- Develop user stories

ACTION ITEMS FROM PREVIOUS MEETING

- Prepare more questions for product owner
- Develop user stories

AGENDA ITEMS

- Meet with Product Owner
- Discuss goals for Fall Release

NEW ACTION ITEMS

- Refine user stories

MEETING MINUTES

Project Requirements and Information :
      Reports must be filed every 6 months (January - July, July - December)
      Need a system to identify teams for semesters and for reporting purposes
      Information may be slightly sensitive (including panther id's, Cell phone numbers, etc). They should not be 'free' to look up on our VIP website.
      VIP project must be faculty led. Outside industries may not be able to propose projects (or sponsor projects) because we may not have faculty in those specific fields. However, if we do have faculty outside help is very useful.
      Projects are hard to start. One of our biggest incentives are to give credits to PhD students.

Credits : (This is a suggestion by other universities)
      1 Semester - 2 credits.
      2 Semesters - Labeled 'Independent Project'
      3 Semesters - Can count as senior project.

Goals for Fall Release:

- Version of software where faculty can propose VIP projects, they can be reviewed, accepted, and denied.

- Announcement system so faculty know about the VIP project (Deadlines for projects etc).
  [Possible user story: include a calendar with due dates for project submissions and others].

- PI (Principal Investigator) needs to be notified when new proposals are submitted. Also allow him to review and reject proposals.

- PI Should be notified when students apply for the project. This notification should include details such as : rank, major, ethnicity, **previous projects** etc.
  [Choose between using panthersoft or request for student to register information for the system]

- PI Should be able to follow up with students to ensure they are rejoining the projects from previous semesters.

- Announce to students availability of VIP projects and all the benefits (Credits etc).

- Students should be able to review projects for the current semester, as well as request to join one or more projects.

- Faculty working on a project should be notified of students who are approved for the project by the PI before students are placed into the project (so they can decide if they want to work with a given student).

- Students need to be able to confirm that they will join the project when notified about acceptance. Students should be able to join on-going projects.

- Generate information for the 6-Month report throughout the semesters.

For more Information on individual sprints refer to the SEMESTER GOALS document.

Previously made User Stories :

- As a student, I want to be able to apply to the program.
- As a student, I want to receive email updates from FIU VIP. (Lukas Borges)

- As a student, I want an online application to apply to project. (Steven Rowe)
- ~~As a student, I want to be able to record my progress in the project. (Emmanuel Gonzalez)~~
  Not goal for our release. We also will use other tools (Mingle, etc).
- As a student, I want to be able to know what kinds of projects are available for me to join/contribute (A nice interface that will allow me to browse through the current projects and each project will highlight the topic and give
- As a graduate student, I to be able to view the progress entries of the students I supervise.(Emmanuel Gonzalez)
- As a Pi, I want to be able to record my progress in the project. (Emmanuel Gonzalez)
- As a Pi, I want to be able to view all the students progress records.
- As a Pi, I want an application to keep track of all financial transactions related to individual projects, so I can keep track of money spent and current project balance. (Garrett Lemieux)

  These stories, while correct, are too large for sprints. We will need to refine them further.

We will be working **10 (2 hours per day for our projects for 5 days)** hours per week outside of lectures to work on our sprints. This time does not include lectures or our 3 hours designated for reading each week (Keep up with the reading materials on the schedule!)

MEETING AGENDA – WEEK 3

MEETING INFORMATION

Objective: Sprint 0 Review and Sprint 1 Planning

Date:	09/09/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
    Chris Naranjo
    Garrett Lemieux
    Alex Sanchez
    Tom Lam
    Lucas Iglesias
    Steven Rowe
    Eric Aguiar
    Alan Nieto
    Pierre Jimenez
    Eduardo Guerra
    Andrew Mitchell
    Emmanuel Vinas
    Emmanuel Gonzalez
    Brenda Izquierdo
    Tiago Moore
    Lukas Borges
    Joseph Casal
    Luis Puche
    Sean Iamartino
    Jacob Leschen

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Develop user stories

AGENDA ITEMS

- Sprint 0 Review
- Sprint 1 Planning
- Determine system goals
- Break into smaller groups based off user story

NEW ACTION ITEMS

- Download StarUML

MEETING MINUTES

Sprint 0 Review :
Come up with a system design as a group
        Platform design has been decided: Website
It was suggested we use StarUML for our diagrams.
        We all need to be proficient in UML diagrams
We've agreed to work **10 hours per week outside of class** towards this project.
        2-5 weekly("daily") scrum meetings per group.
        This is not including other required work for lectures and readings.

System Goals(Semester Release) - Release 1 VIP:
(Relevant Story Number on Mingle is below goal)
1. Facilitate 6-month reporting for PI *(Generic stories are going here as well)*
    a. (#666)
    b. Will need more stories related to reporting
2. Enable project proposal submission, review, and approval
    (#672)
3. Enable students application to VIP approved projects
    (#673)
    (#669)
4. Announcement system
    Invite faculty to submit proposals
    (#670)
    (#667)
    (#671)
5. Project and Student Evaluation
.   (#683)
    (#680)

        Additionally we need to determine which goals are dependant on others, and what kind of dependency it is. (See *semester goals* document on drive).

Users:
        A *[admin, faculty member, student]* is a user.
        We should create user stories for developers

UML Diagrams (Unified Modeling Language)
        Abstracting and modeling the current concepts that are important to the system
        Ability to remove information that is unneeded *at the moment*
        Facilitates focus on the important topics for now

        UML diagrams are all graphic (graphs)
            Describes relationships between items.
            Bubbles represent [some item]
            Connecting lines dictate relationships between [some items]

        Types: *(Discussed in class, look into more for convention)*
            Class Diagrams
                Name at the top
                Properties describing that class below it.

        See *StarUML* as software to use for this
        We will have to decide on a UML convention for this project going forward

Sprint 1 Planning:

We need to split up into groups, and have each scrum master announce which user story they are claiming. (Preferably by the end of the day, email Prof. with choice)

All of the user stories are up on Mingle.

New projects will be created in Mingle for each of the groups.

This is going to be an incremental process

Keep in mind:

At the end of the day(semester..), we all want to be able to showcase every aspect of Software Engineering that we applied here.

In addition, our documentation and work needs to be understandable for whomever works on this project in the future

Once we're in groups, we don't need to have a major accomplishment every day.

MEETING AGENDA – WEEK 4

MEETING INFORMATION

Objective: Practice Scrum meeting and discuss technologies for the project

Date:	09/14/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
    Garrett Lemieux
    Steven Rowe
    Andrew Mitchell
    Tiago Moore
    Brenda Izquierdo
    Sean Iamartino
    Joseph Casal
    Luis Puche
    Eric Aguiar
    Tom Lam
    Lucas Iglesias
    Alan Nieto
    Lukas Borges
    Eduardo Guerra
    Emmanuel Vinas
    Pierre Jimenez
    Lizette Mendoza
    Emmanuel Gonzalez
    Jacob Leschen

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Get familiar with new groups
- Download StarUML for diagrams

AGENDA ITEMS

- Practice Scrum meetings
- Discuss new technologies for project

NEW ACTION ITEMS

- Prepare for meeting with Product Owner

MEETING MINUTES

Practice Scrum Meetings:
Group One: Scrum Meeting - Refer to scrum document under group 1 folder.
Group Two: Scrum Meeting
(Each team should fill in their information or create a folder logging each teams scrub meetings)
Group Three: Scrum Meeting
Group Four: Scrum Meeting

Discuss Technologies:
Server Stack - software bundle inside a server
- Mean - Mongo DB , Express.js , Angular JS , node.js
- XAMPP (Windows)
- LAMPP (Linux)

Cross-Platform - Apache , MySQL , PHP , PERL

Deployment Diagram
- Need to keep in mind functional goals
- Make sure functionality is accessible through all devices
- Make sure it is Reasonable and Responsive
- Sensitive Information

AWS - EC - 2 - **MEAN**
FIU Server - **XAMPP**

MEETING AGENDA – WEEK 4

MEETING INFORMATION

Objective: Discuss server Stacks

Date:	09/14/2015	Location:	PG6
Time:	1530	Meeting Type:	Group Meetings
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
    Emmanuel Gonzalez
    Brenda Izquierdo
    Andrew Mitchell
    Lizette Mendoza
    Steven Rowe
    Alan Nieto
    Joseph Casal
    Eduardo Guerra
    Eric Aguiar
    Garrett Lemieux
    Tiago moore
    Lukas Borges
    Jacob Leschen
    Tiago Moore

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

AGENDA ITEMS

- Discuss different servers

NEW ACTION ITEMS

- Discuss the new Server Stack selected

MEETING MINUTES

Discussing different Server Stacks to implement into our project:

Stacks
Mean (MongoDB, Express, Angular, Node.js)
Tomcat
Lamp (Linux, Apache, MySQL, PHP)

- If we use an Ubuntu server we should give root access to Masoud. The independent scrum teams would receive an Admin user account.
- **We agreed to use the LAMP Stack**
- We need to discuss the workflow with Masoud. We should debate whether every group should develop independently offline or online.
- Need developer user stories "Me as a developer "
- codedrops.com for front end development

Next Step
- Figure out a host with Sadjadi
- How are we dividing the work among groups?

MEETING AGENDA – WEEK 4

MEETING INFORMATION

Objective: Scrum meeting and decide on Stack

Date:	09/16/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
   Andrew Mitchell
   Christopher Naranjo
   Eric Aguiar
   Garrett Lemieux
   Lizette Mendoza
   Brenda Izquierdo
   Emmanuel Vinas
   Tom Lam
   Steven Rowe
   Emmanuel Vinas
   Alan Nieto
   Joseph Casal
   Jacob Leschen
   Eduardo Guerra
   Pierre Jimenez
   Tiago Moore
   Luis Puche
   Alex Sanchez

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Research different stacks

AGENDA ITEMS

- Scrum meeting
- Reviewed Stacks

NEW ACTION ITEMS

- Prepare for meeting with Product Owner

MEETING MINUTES

Started with all groups scrum meetings most people reviewed LAMP stack.

LAMP vs MEAN vs Apache TOMCAT

MEAN = MongoDB, Express, Angular Javascript, Node JS. -
Better security, faster. More of a challenge, learning new NoSQL will be useful for the future. Done in Javascript which is translated to C.

LAMP = Linux, Apache, MySQL, PHP -
Based on systems we already know (MySQL, Linux, Apache, need to learn PHP, can also use python)

TOMCAT - Older, very easy, but not as sophisticated.

Decided on **MEAN** stack! Learn it!

Developing code :

Develop on local environment (Specific user story branch)
Show to Product Owner
Push to developer team
Merge with Project
Push to development server and test
Note : Use slack to announce when you are updating server. Check slack before updating the server!

This semester we work on development server. Master copy will be on a separate release server.

Our Web Address :
vip-dev.cis.fiu.edu

Need a system design by Monday
Deployment diagram, Architecture, Software Stack, etc.
We need to learn the tools for our MEAN stack.
Have a user story for how we use MEAN stack to implement our group user story.
Four Tiered System

MIDTERM is coming!

Next time Talk about Four Tiered Diagram. UML Etc.

MEETING AGENDA – WEEK 5

MEETING INFORMATION

Objective: MEAN Stack

Date:	09/16/2015	Location:	PG6
Time:	1530	Meeting Type:	Group Meetings
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
    Garrett Lemieux
    Eric Aguiar
    Brenda Izquierdo
    Chris Naranjo
    Jacob Leschen
    Joseph Casal
    Lizette Mendoza
    Pierre Jimenez
    Emmanuel Vinas
    Alan Nieto
    Andrew Mitchell
    Steven Rowe

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

AGENDA ITEMS

- IDEs to code
- Setup MEAN Stack locally
- Learn how to use Express

NEW ACTION ITEMS

- Set up local environment

MEETING MINUTES

//For logos
Blender
Gimp

Code Pen is public … Good because you can see what your doing in real time.

Firefox inspector:

- You can see the calls being made in the canvas and can see what's happening in real time.

Bitnami MEAN Stack:
- Create a new virtualbox and use Bitnami iso to create the new machine
- Can also add to a native machine by downloading from website

git pull https://github.com/scotch-io/starter-node-angular.git

<u>How to use Express:</u>
methodoveride

bodyparser - parses html files … parsers for files

In order to use modules use app.use()
FontAwesome

Simple Angular Application:

html:
- angular is an application formatted like a tree
- <div

Double brackets called mustache notation -- whatever inside bracket parsed as html

Randbag is an object or basically a function same thing in javascript

MEETING AGENDA – WEEK 5

MEETING INFORMATION

Objective: Discuss server architecture and agree on development platform

Date:	09/21/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
    Chris Naranjo
    Andrew Mitchell
    Lucas Iglesias
    Eric Aguiar
    Lizette Mendoza
    Lukas Borges
    Eduardo Guerra
    Emmanuel Vinas
    Alan Nieto
    Steven Rowe
    Jacob Leschen
    Tom Lam
    Alex Sanchez
    Sean Iamartino
    Garrett Lemieux
    Joseph Casal
    Pierre Jimenez
    Luis Puche
    Brenda Izquierdo
    Tiago Moore

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Learn about architectural structures

AGENDA ITEMS

- Website domain setup
- Discuss possible architectures

NEW ACTION ITEMS

- Decide on an architectural server structure
- Deployment diagram

MEETING MINUTES

A common user and password has been created on **vip-dev.cis.fiu.edu** which will has sudoer privileges. Talk to peers for login information.
This is solely our development server. Different server for production/live at the end of semester
Notify class on Slack if you are working on the server, so we don't get any conflicts

Linux kernel version: 3.13.0-24-generic

Our normal fiu accounts also have access, but no sudoer privileges. Please don't add yourself as a sudoer.

Windows users, use PuTTY to SSH into our server.

We will do all software installation and structure creation *in class*. Afterwards we'll just commit our modifications (with git) to the server's repository.

See VIP Documentation(on drive) for more information about architecture and structure.
Additionally, we need to get better at UML diagrams. That is, once it's developed it needs to follow some common design pattern.
We'd want many lines between each subsystem, but minimize the connections between classes.

Architecture
Client/Server
Common services are being delivered by a node/server, over a network.
Will listen for requests coming from a specific port (usually 80, but we would use a different one for our project)
Clients submit requests to the server
All of our requests should come through a web browser
Keep in mind that this is a 2-tier architecture
P2P
Layered
Lower layers don't know anything about layers above it.

Need to agree on some architecture
Develop a deployment diagram for our project.
Be aware of how we create the diagram, as it's layout has some particular meaning.

MEETING AGENDA – WEEK 5

MEETING INFORMATION

Objective: Get user stories approved

Date:	09/23/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
Garrett Lemieux
Chris Naranjo
Eric Aguiar
Jacob Leschen
Lizette Mendoza
Steven Rowe
Brenda Izquierdo
Lucas Iglesias
Alan Nieto
Joseph Casal
Andrew Mitchell
Pierre Jimenez
Eduardo Guerra
Emmanuel Vinas
Alex Sanchez
Luis Puche

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Edit / begin working on user stories

AGENDA ITEMS

- Scrum Meeting
- Proper user story criteria
- Get user story approvals

NEW ACTION ITEMS

- Set up local development environment
- Begin working on user story
- Get user story approved if not approved in class

MEETING MINUTES

Get user story approval from prof.

User stories need to be formatted as such:
>*who*
>*what*
>*why*
>*acceptance criteria*
>>What would the product owner be able to do once the user story is completed.

Also we're warned, don't make assumptions without contacting product owner first.

Everyone has an additional user story to set up their local development environment(s).

Before we start actually coding, we need to formally develop:
>Requirements
>>Actors
>>>*interactions between actors and the user story''s criteria*
>>Use cases
>>UML diagrams
>>Class diagrams
>>Sequence diagrams
>>etc..

>>Essentially, create documents that will assist you in defining and documenting out the requirements for your stories. It won't be the same for everyone. ***But we all need some form of documentation***.

Spent remainder of class time stating our user stories for approval.

MEETING AGENDA – WEEK 6

MEETING INFORMATION

Objective: Local development environment

Date:	09/28/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
    Emmanuel Vinas
    Tiago Moore
    Garrett Lemieux
    Chris Naranjo
    Steven Rowe
    Joseph Casal
    Eric Aguiar
    Sean Iamartino
    Tom Lam
    Andrew Mitchell
    Alan Nieto
    Eduardo Guerra
    Pierre Jimenez
    Jacob Leschen
    Alex Sanchez
    Lucas Iglesias
    Brenda Izquierdo
    Lizette Mendoza
    Luis Puche

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Setup local environment
- Work on user story

AGENDA ITEMS

- Scrum Meeting
- Ensure everyone knows how to set up local environment
- Overview of Bitnami MEAN Stack setup

NEW ACTION ITEMS

- Get to work on user stories

MEETING MINUTES

Directory Structure :
     source_code
     documentation
     tutorials

See tutorials folder in our Google Drive to access the files used in class to set up the dev. environment.

Make sure to ignore local config. files in the GIT repository.

Folders are all lowercase with underscore between words.

PhD contact while Sadjadi is away: mtahe006@fiu.edu

MEETING AGENDA – WEEK 6

MEETING INFORMATION

Objective: Clean up Mingle and how to use Git

Date:	09/28/2015	Location:	PG6
Time:	1530	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
    Eduardo Guerra
    Andrew Mitchell
    Chris Naranjo
    Steven Rowe
    Joseph Casal
    Pierre Jimenez
    Eric Aguiar
    Jacob Leschen
    Tiago moore
    Alan Nieto
    Lizette Mendoza

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

AGENDA ITEMS

- Clean up user stories in Mingle
- Tutorials on how to use Git

NEW ACTION ITEMS

MEETING MINUTES

Clean up user story cards on mingle
Git

MEETING AGENDA – WEEK 6

MEETING INFORMATION

Objective: Practice Scrum Meetings

Date:	09/30/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
    Chris Naranjo
    Jacob Leschen
    Tom Lam
    Steven Rowe
    Sean Iamartino
    Lucas Iglesias
    Andrew Mitchell
    Garrett Lemieux
    Emmanuel Vinas
    Alan Nieto
    Eric Aguiar
    Tiago Moore
    Brenda Izquierdo
    Lizette Mendoza
    Luis Puche

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Work on user story

AGENDA ITEMS

- Proper Scrum Meeting tips

NEW ACTION ITEMS

- Continue working on user story

MEETING MINUTES

Scrum Meeting Tips
1. Not used as solving session
   Issues raised should/will be done immediately after the meeting
2. Not a status update meeting.
   Need information about what is behind schedule
   Rather it is where you say your commitments to the team

3. During the daily scrum each member should be answering the following
   What did you do yesterday?
   What will you do today?
   Are there any impediments in your work?

MEETING AGENDA – WEEK 7

MEETING INFORMATION

Objective: Implement basic FIU VIP webpage

Date:	10/05/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Lukas	Minute Taker:	Lukas

Attendees:
    Garrett Lemieux
    Andrew Mitchell
    Taigo Moore
    Lukas Borges
    Pierre Jimenez
    Eduardo Guerra
    Lucas Iglesias
    Eric Aguiar
    Steven Rowe
    Alan Nieto
    Jacob Leschen
    Chris Naranjo
    Brenda Izquierdo
    Lizette Mendoza
    Emmanuel Vinas
    Luis Puche
    Alex Sanchez

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Continue working on user story

AGENDA ITEMS

- Implement basic skeleton for FIU VIP website

NEW ACTION ITEMS

- Pull new webpage
- Get to work on implementing user story

MEETING MINUTES

- Trying to start a application using Express
- Need to install Express

- Everyone needs to get express sample and run it … once done it on local server we all can start same place.
- app.js is the server
- Jade is updated version of html
- Install Bower
- Got webpage working with to sections nerd and geeks
- Working now push to master
- Must use nodejs instead of nodex
- Sample application is up and working

MEETING AGENDA – WEEK 7

MEETING INFORMATION

Objective: Sprint 3 Review and Sprint 4 Planning

Date:	10/07/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
    Steven Rowe
    Garrett Lemieux
    Joseph Casal
    Alan Nieto
    Lizette Mendoza
    Brenda Izquierdo
    Eric Aguiar
    Lukas Borges
    Christopher Naranjo
    Alex Sanchez
    Sean Iamartino
    Emmanuel Gonzalez
    Pierre Jimenez
    Tom Lam
    Tiago Moore
    Andrew Mitchell
    Jacob Leschen
    Lucas Iglesias
    Emmanuel Vinas
    Eduardo Guerra
    Luis Puche

PREPARATION FOR MEETING

- Read PowerPoints scheduled for this week

ACTION ITEMS FROM PREVIOUS MEETING

- Work on user stories

AGENDA ITEMS

- Scrum Meeting
- Sprint 3 Review
- Sprint 4 Planning

NEW ACTION ITEMS

- Continue working on user story

MEETING MINUTES

Groups met together to discuss progress.
Fix any impediments as a class

Discussed Sprint 3 Review

Began Sprint 4 Planning

MEETING AGENDA – WEEK 8

MEETING INFORMATION

Objective: Group Scrum Meetings

Date:	10/12/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
      Christopher Naranjo
      Garrett Lemieux
      Eduardo Guerra
      Pierre Jimenez
      Eric Aguiar
      Steven Rowe
      Alan Nieto
      Jacob Leschen
      Brenda Izquierdo
      Tiago Moore
      Sean Iamartino
      Andrew Mitchell
      Emmanuel Vinas
      Tom Lam
      Luis Puche
      Lizette Mendoza

PREPARATION FOR MEETING

ACTION ITEMS FROM PREVIOUS MEETING

- Finish up user stories

AGENDA ITEMS

- Assist group members with any issues with user stories
- Work on UML diagrams

NEW ACTION ITEMS

- Work on UML diagrams

MEETING MINUTES

Group Scrum
Group user story development

MEETING AGENDA – WEEK 8

MEETING INFORMATION

Objective: Discuss VIP (the Vertically Integrated Projects Program)

Date:	10/14/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Lukas	Minute Taker:	Lukas

Attendees:
    Steven Rowe
    Garrett Lemieux
    Joseph Casal
    Alan Nieto
    Lizette Mendoza
    Brenda Izquierdo
    Eric Aguiar
    Lukas Borges
    Christopher Naranjo
    Alex Sanchez
    Sean Iamartino
    Emmanuel Gonzalez
    Pierre Jimenez
    Tom Lam
    Tiago Moore
    Andrew Mitchell
    Jacob Leschen
    Emmanuel Vinas
    Eduardo Guerra
    Luis Puche

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 1

ACTION ITEMS FROM PREVIOUS MEETING

- Work on UML diagrams

AGENDA ITEMS

- Continue to work on UML diagrams

NEW ACTION ITEMS

- Bring completed UML diagrams to class

MEETING MINUTES

MEETING AGENDA – WEEK 9

MEETING INFORMATION

Objective: UML Diagrams and Database Schema

Date:	10/19/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago Moore	Minute Taker:	Tiago Moore

Attendees:
        Tiago Moore
        Lukas Borges
        Garrett Lemieux
        Jacob Leschen
        Andrew Mitchell
        Emmanuel Vinas
        Chris Naranjo
        Sean Iamartino
        Alex Sanchez
        Brenda Izquierdo
        Steven Rowe
        Pierre Jimenez
        Lizette Mendoza
        Alan Nieto
        Luis Puche

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 2
- Please Bring: Individual Subsystem Documentation

ACTION ITEMS FROM PREVIOUS MEETING

- Individual Subsystem Documentation (User Story documentation)

AGENDA ITEMS

- TEAM SCRUM [20 min]
- Database Schema[30 min]
- Login - System Workflow [25 min]

NEW ACTION ITEMS

- Correct UML and Sequence diagrams for next class

MEETING MINUTES:

- GROUPS SHOWED THE DIAGRAMS THEY CREATED TO THE GROUPS AND PROFESSOR FOR ACCURACY
- WILL CORRECT ANY DISCREPANCIES FOR NEXT CLASS

MEETING AGENDA – WEEK 9

MEETING INFORMATION

Objective: Enter the objective of the meeting here.

Date:	10/19/2015	Location:	PG6
Time:	1530	Meeting Type:	Group Meetups
Timekeeper:	Tiago Moore	Minute Taker:	Tiago Moore

Attendees:
        Tiago Moore
        Lukas Borges
        Garrett Lemieux
        Andrew Mitchell
        Chris Naranjo
        Lizette Mendoza
        Pierre Jimenez
        Eric Aguiar
        Eduardo Guerra
        Steven Rowe
        Joseph Casal
        Sean Iamartino
        Tom Lam

AGENDA ITEMS

- Manny display how to tie front end to database

NEW ACTION ITEMS

- Study Manny's Code

MEETING MINUTES:

MANNY'S CODE IS POSTED ON SLACK ON- CREATES USERS AND SENDS IT TO DATABASE

MEETING AGENDA – WEEK 9

MEETING INFORMATION

Objective: Show and tell

Date:	10/21/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago Moore	Minute Taker:	Tiago Moore

Attendees:
    Tiago Moore
    Lukas Borges
    Garrett Lemieux
    Chris Naranjo
    Emmanuel Vinas
    Andrew Mitchell
    Lizette Mendoza
    Alex Sanchez
    Steven Rowe
    Brenda Izquierdo
    Sean Iamartino
    Luis Puche

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 3
- Show and Tell Code

ACTION ITEMS FROM PREVIOUS MEETING

- Complete Sprint 4 tasks

AGENDA ITEMS

- Show and Tell

NEW ACTION ITEMS

- Fix up user stories

MEETING MINUTES:

SHOW AND TELL -
        TIAGO NEED TO MAKE A WIZARD FOR RESUME, ONE SINGLE PAGE FORM IS NO GOOD.
        EVERYONE IMPROVE ON THEIR USER STORIES AS BROUGHT OUT BY PRODUCT OWNER

MEETING AGENDA – WEEK 10

MEETING INFORMATION

Objective: What a Software Engineer MUST know

Date:	10/26/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Lukas Borges	Minute Taker:	Lukas Borges

Attendees:
>   Tiago Moore
>   Steven Rowe
>   Christopher Naranjo
>   Andrew Mitchell
>   Pierre Jimenez
>   Alan Nieto
>   Eric Aguiar
>   Jacob Leschen
>   Eduardo Guerra
>   Alex Sanchez
>   Garrett Lemieux
>   Lukas Borges
>   Sean Iamartino
>   Luis Puche
>   Brenda Izquierdo
>   Lizette Mendoza
>   Tom Lam

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 4

ACTION ITEMS FROM PREVIOUS MEETING

- Push Dev Code to Repo
- Compile group documentation

AGENDA ITEMS

- What do we need to pass this class …

NEW ACTION ITEMS

- Work on documentation
- Work on code

MEETING MINUTES

Meeting Minutes:

To graduate from this class:
Software solution is not deciding.
Working as a team
Documentation
Communication skills
Knowing your audience
Software Design (Star UML, and whatever)
Knowing scrum (and keywords)
Interaction with product owner (developing user stories to satisfy the requirements)
Requirement analysis
Knowing how to test software
Whitebox testing, Blackbox testing, unit testing and automated testing.
Show enough of these aspects to avoid failing this class.
Model View Controller: A way of organizing the solution
Separates what belongs to interaction with the actors of the system (view).
Controller is the business logic
Model is the persistency (the heart of the system, in our case, Database).
Model is what is going to change the least.

Examples:
Model: Users, Projects, Applications, Calendar, every object concept that requires persistency.
Views: Login page, Peer evaluation page, Student information page, these are all views.
Controller: Functions such as applicationSubmission(), studentEvaluation() are controllers.

Sequence Diagram should initiated by an actor that pokes the system.
Arrows cannot go upwards unless you're Marty McFly.
There should be no 'database'. Sequence diagram is higher level, use 'model' instead.

MEETING AGENDA – WEEK 11

MEETING INFORMATION

Objective: Prepare for Show and Tell

Date:	11/2/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Lukas	Minute Taker:	Lukas

Attendees:
　　　　Christopher Naranjo
　　　　Jacob Leschen
　　　　Tiago Moore
　　　　Andrew Mitchell
　　　　Emmanuel Gonzalez
　　　　Brenda Izquierdo
　　　　Sean Iamartino
　　　　Steven Rowe
　　　　Alex Sanchez
　　　　Pierre Jimenez
　　　　Eric Aguiar
　　　　Alan Nieto
　　　　Eduardo Guerra
　　　　Garrett Lemeiux
　　　　Emmanuel Vinas
　　　　Luis Puche
　　　　Lizette Mendoza

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 5

ACTION ITEMS FROM PREVIOUS MEETING

- Push to dev code to the repo

AGENDA ITEMS

- How to prepare for show and tell

NEW ACTION ITEMS

- Finish user stories
- Show and tell

MEETING MINUTES

- Demonstration of coding, documentation, testing, etc will earn you a C, however the quality of this will earn you an A.
- Masoud has short memory which may work against or for you

Next Class:

- Show and tell, be quick about and don't waste time
- User stories must be done
- after show and tell must explain plan for integration
  - must be able to explain work that you depend on and vice versa
- Sprint planning for next sprint will also be done

MEETING AGENDA – WEEK 11

MEETING INFORMATION

Objective: Show and tell on local environment

Date:	11/04/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Lizette	Minute Taker:	Lizette

Attendees:
      Christopher Naranjo
      Jacob Leschen
      Tiago Moore
      Andrew Mitchell
      Emmanuel Gonzalez
      Sean Iamartino
      Steven Rowe
      Pierre Jimenez
      Eric Aguiar
      Alan Nieto
      Eduardo Guerra
      Garrett Lemeiux
      Brenda Izquierdo
      Emmanuel Vinas
      Luis Puche
      Alex Sanchez
      Lizette Mendoza
      Luis Puche
      Tom Lam

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 6

ACTION ITEMS FROM PREVIOUS MEETING

- Prepare for show and tell

AGENDA ITEMS

- Show and tell

NEW ACTION ITEMS

- Work on improving code

MEETING MINUTES

Show and tell
      Not everyone presented so be sure to finish your user story if not

For those who did present, be sure to make changes addressed by Sadjadi

Next show and tell will be on the FIU VIP server

NICE WORK EVERYONE!

MEETING AGENDA – WEEK 12

MEETING INFORMATION

Objective: Documentation

Date:	11/09/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
> Christopher Naranjo
> Jacob Leschen
> Tiago Moore
> Andrew Mitchell
> Emmanuel Gonzalez
> Sean Iamartino
> Pierre Jimenez
> Eric Aguiar
> Alan Nieto
> Alex Sanchez
> Eduardo Guerra
> Steven Rowe
>> Garrett Lemeiux
> Emmanuel Vinas
> Luis Puche
> Lizette Mendoza

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 7

ACTION ITEMS FROM PREVIOUS MEETING

- Improve user stories
- Complete user stories

AGENDA ITEMS

- Scrum meeting
- Discuss documentation

NEW ACTION ITEMS

- Begin integration of user stories

MEETING MINUTES

Spoke with Sadjadi about what is needed for the documentation
Cleared up any issues with our user stories as a group

Began discussing how we would go about the over all integration – first in groups, then as a class

MEETING AGENDA – WEEK 13

MEETING INFORMATION

Objective: Enter the objective of the meeting here.

Date:	11/16/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
>
> Christopher Naranjo
> Jacob Leschen
> Tiago Moore
> Andrew Mitchell
> Emmanuel Gonzalez
> Sean Iamartino
> Pierre Jimenez
> Eric Aguiar
> Steven Rowe
> Brenda Izquierdo
> Alan Nieto
> Alex Sanchez
> Eduardo Guerra
>   Garrett Lemeiux
> Emmanuel Vinas
> Luis Puche
> Lizette Mendoza

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 8

ACTION ITEMS FROM PREVIOUS MEETING

- Begin integration

AGENDA ITEMS

- Discuss functions needed to complete user stories

NEW ACTION ITEMS

- Create needed functions for other groups
- Continue integration

MEETING MINUTES

Group 1 and 2 integrated

Trying to figure out who needs what function from who to get this show on the road:

Group 3 needs functions from Garrett, Chris and Andrew
Group 4 need nodemailer from Eduardo

Waiting on Group 3 and 4 to complete user stories to integrate as a class

MEETING AGENDA – WEEK 13

MEETING INFORMATION

Objective: Integration

Date:	11/18/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Manny	Minute Taker:	Manny

Attendees:
> Christopher Naranjo
> Jacob Leschen
> Tiago Moore
> Andrew Mitchell
> Emmanuel Gonzalez
> Sean Iamartino
> Pierre Jimenez
> Eric Aguiar
> Steven Rowe
> Alan Nieto
> Eduardo Guerra
> Garrett Lemeiux
> Emmanuel Vinas
> Brenda Izquierdo
> Luis Puche
> Lizette Mendoza
> Tom Lam

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 9

ACTION ITEMS FROM PREVIOUS MEETING

- Complete user stories
- Integrate groups 3 and 4

AGENDA ITEMS

- Push code to master repo

NEW ACTION ITEMS

- Prepare for show and tell
- Class integration
- Work on UML diagrams

MEETING MINUTES

Working with the remaining groups to see who is left to complete user stories
Group 1 and 2 and 3 merged – waiting on group 4

MEETING AGENDA – WEEK 14

MEETING INFORMATION

Objective: Final show and tell

Date:	11/23/2015	Location:	PG6
Time:	1200	Meeting Type:	Class
Timekeeper:	Tiago	Minute Taker:	Tiago

Attendees:
    Christopher Naranjo
    Jacob Leschen
    Tiago Moore
    Andrew Mitchell
    Emmanuel Gonzalez
    Brenda Izquierdo
    Sean Iamartino
    Pierre Jimenez
    Eric Aguiar
    Joseph Casal
    Alan Nieto
    Steven Rowe
    Eduardo Guerra
    Garrett Lemeiux
    Emmanuel Vinas
    Luis Puche
    Alex Sanchez
    Lizette Mendoza
    Tom Lam

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 10

ACTION ITEMS FROM PREVIOUS MEETING

- Integrate entire class

AGENDA ITEMS

- Final Show and Tell

NEW ACTION ITEMS

- Put finishing touches on the project

MEETING MINUTES

Last day of class

Showed our user stories as a class on the VIP website
Still have some things to fix before the end of the semester… Do it!

Can still use the class to meet if necessary

MEETING AGENDA – WEEK 14

MEETING INFORMATION

Objective: Work as a team to finish up project

Date:	11/25/2015	Location:	PG6
Time:	1200	Meeting Type:	Group Meeting
Timekeeper:	Lizette	Minute Taker:	Lizette

Attendees:
  Christopher Naranjo
  Jacob Leschen
  Tiago Moore
  Andrew Mitchell
  Emmanuel Gonzalez
  Sean Iamartino
  Steven Rowe
  Alex Sanchez
  Pierre Jimenez
  Eric Aguiar
  Brenda Izquierdo
  Alan Nieto
  Joseph Casal
  Eduardo Guerra
  Garrett Lemeiux
  Emmanuel Vinas
  Luis Puche
  Lizette Mendoza

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 11

ACTION ITEMS FROM PREVIOUS MEETING

- Push final integrations to master repo

AGENDA ITEMS

- Project documentation requirements
- Diagrams
- Make sure everyone is finishing their user stories

NEW ACTION ITEMS

- Finish user stories
- Complete three UML diagrams: class, sequence, use case

MEETING MINUTES

Clarification on what is needed for project documentation
      UML diagrams:
      Class diagrams
      Sequence diagrams
      Use case diagrams

Combine diagrams where necessary. Not all groups need to combine all diagrams

Make sure everyone can access RockMongo
Ensure everyone has set up their userType properly

Set up a chat in Slack to let people know when to push and pull from GitHub. DO NOT PUSH WITHOUT LETTING THE CLASS KNOW AND NOTIFY WHEN DONE

MEETING AGENDA – WEEK 15

MEETING INFORMATION

Objective: Finalize VIP project

Date:	11/30/2015	Location:	PG6
Time:	1200	Meeting Type:	Group Meetings
Timekeeper:	Lizette	Minute Taker:	Lizette

Attendees:
       Christopher Naranjo
       Jacob Leschen
       Tiago Moore
       Andrew Mitchell
       Emmanuel Gonzalez
       Sean Iamartino
       Pierre Jimenez
       Eric Aguiar
       Joseph Casal
       Alan Nieto
       Steven Rowe
       Eduardo Guerra
       Garrett Lemeiux
       Emmanuel Vinas
       Luis Puche
       Lizette Mendoza
       Brenda Izquierdo
       Tom Lam
       Alex Sanchez

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 12

ACTION ITEMS FROM PREVIOUS MEETING

- Push final code
- Modify UML diagrams

AGENDA ITEMS

- Finish up VIP website

NEW ACTION ITEMS

- Push to master repo
- Finish up UML diagrams

MEETING MINUTES

Clean up any issues with VIP website as a team

MEETING AGENDA – WEEK 15

MEETING INFORMATION

Objective: Last meeting

Date:	12/02/2015	Location:	PG6
Time:	1200	Meeting Type:	Group Meetings
Timekeeper:	Lizette	Minute Taker:	Lizette

Attendees:
Christopher Naranjo
Jacob Leschen
Tiago Moore
Andrew Mitchell
Emmanuel Gonzalez
Sean Iamartino
Pierre Jimenez
Steven Rowe
Eric Aguiar
Alan Nieto
Eduardo Guerra
Garrett Lemeiux
Alex Sanchez
Emmanuel Vinas
Luis Puche
Lizette Mendoza
Tom Lam
Joseph Casal

PREPARATION FOR MEETING

- Please Read: Essential Scrum Chapter 13

ACTION ITEMS FROM PREVIOUS MEETING

- Complete and push user stories
- Final touched on UML diagrams

AGENDA ITEMS

- Finalize VIP website
- Discuss documentation
- Discuss project tutorials

NEW ACTION ITEMS

- Finalize UML diagrams
- Send UML diagrams
- Push final code
- Make video tutorials

MEETING MINUTES

UML diagrams due WEDNESDAY NIGHT
Documentation to be completed by Friday night
Final push to VIP server will be NEXT MONDAY
Tutorials due by NEXT THURSDAY
NO EXCEPTIONS! It's crunch time people!

GOOD LUCK ON FINALS EVERYONE!!