# Team Aircap Meeting Minutes

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# Lead Instructor and Technical Advisor Meeting 22 January 2015

Agenda for meeting:

- 1. Need to have agenda at meetings
- 2. Define roles for group
- 3. Confirm or set up future meetings
- 4. Requirements for semester
- 5. Minutes
- 6. Client interview
- 7. Other

There are technical and administrative roles-everyone will have some of each

- Reflector-reflects on things in the meetings
- Budget and supply-deals with money for project(only ONE person)
- Moderator-runs meeting

Gantt Charts - useful for timelines of milestones

Info for project:

- Walk into airport and gather enough energy in two minutes to charge a cell phone battery
- Wants to take advantage of our imagination for this project
- Will be writing a proposal for money from department
- Possibility of marketing product in future
- Need to make it better than the next guy
- Can restrict project if you want, i.e. android only

We should have a good idea of technical aspect by Snapshot day – March 10 Helpful to write specifications: determines if product is working

Specifications for a resistors

- Ohms
- Materials
- Voltage, current, power

Use specifications that already created to help There will still be some that need to be created Need major tasks by about week 6

Requirements for project on webpage

• Negotiate if necessary

Weekly meetings

- Thursday, 9:30
- ECE conference room

Need to reserve conference room for future meetings Can use the Think Tank for group meetings Can also check other rooms around campus for meetings

Client Interview

- Get info from web
- Hhess054 google calendar

Go over webpage Create questions for client 1 hour limit for meetings

# Lead Instructor and Technical Advisor Meeting 30 January 2015

Agenda for meeting:

- 1. Minutes from last meeting
- 2. Roles assigned
- 3. Information for Stacy Rauch
- 4. Team Contract
- 5. Client Interview

Moderator – Darion Marlin Budget and supply, reflector – Brooks Prather Documenter – Brian Patterson

Need to write a proposal

- Dr. Johnson has rules for the proposal
- Two pages should be long enough

Meeting next week to discuss research ideas

Snapshot day on March 10 Should be approved by Dr. Hess before that

Went over group contract

- Documenter maintains wiki page
- Team meetings: review agenda, take a cursory look at timeline, budget report, contract is amended by unanimous consent

Client Interview

• Tuesday February 3 at 8:30 A.M.

Need portfolio (binder with all info of project)

#### Lead Instructor and Technical Advisor Meeting 6 February 2015

Agenda for meeting:

- 1. Minutes from last meeting
- 2. Review Client Interview
- 3. Questions compiled from group members research meeting
- 4. Project learning plan

**Client Transcript** 

- Summarize with review
- 1 page
- Reflection of what we need to do

#### Questions

How would it be possible to do this without destroying battery?

Download energy and store it, tons of time on the plane to charge. Addition to phone. Can make it for other devices than phone, but depends on interface.

Don't be too ambitious.

Project Learning Plan

- Make on our own, our achievements
- Keep updating so it's a month ahead
- General outline for whole calendar year

Look at ultra-cap setup down in the lab Figure out interface for this setup and minimize it

Write the proposal to turn in

# Lead Instructor and Technical Advisor Meeting 13 February 2015

Agenda for meeting:

- 1. Minutes from last meeting
- 2. O'Connor Proposal
- 3. Corbett Proposal
- 4. Transcript and Specifications: bblearn assignment

Not currently using the Morgan for senior projects

Go ahead and move forward with proposal

Should be data sheets online for equipment in lab

Specifications:

- Look up battery chargers on the web
- Easy one is resistor
- Put tolerance on specification

Hold charge for at least 3 hours

Specifications for now are more general Need something on the table for now

Action items: Turn in proposals Write specifications

# Lead Instructor and Technical Advisor Meeting 20 February 2015

Agenda for meeting:

- 1. Minutes from last meeting
- 2. Specifications Analysis
- 3. Draft of the overall budget

Look at specifications

- Every number should have a tolerance whatever is reasonable
- Will use specifications as check list to see if project is complete
- Specify in terms of c rates
- Might have problems getting energy through USB
- Should be able to buy rectifier
- Manufacturers have application notes tell you how to use chip and give suggestions for other parts to use with it
- Can negotiate a change to specifications later

Budget Draft

- Look at specs of flyback converter to drop voltage down to 5 or 10 V
- Won't need as many capacitors this way
- Can find case for less
- Contact Google for test phones
- Reasonable to get started

Is there a preferred vendor?

Maxwell has been around for a long time, first place to look. Can look around but don't have time to do a detailed search.

March 3 – Logbooks due

Action Items:

- Turn in Client Transcript and Specifications
- Turn in budget for Corbett Proposal

## Lead Instructor and Technical Advisor Meeting 27 February 2015

Agenda for meeting:

- 1. Minutes from last meeting
- 2. Endowment Proposal Progress
- 3. What is needed for Snapshot Day
- 4. Expo Registration

Corbett Proposal:

- Email was sent to check on it
- O'Connor proposal is still in process as well

#### Snapshot Day:

- Will be in the Power Lab
- Most groups use PowerPoint or poster
- Have not done a lot yet, so most teams try to present what they are planning to do
- Specifications will be useful
- Need to work on timeline
- Design Review about a month later; timeline needs to be finalized
- Send PowerPoint to Dr. Hess for review

#### Expo:

- Just want to make sure everything looks good
- Abstract should be reviewed by Dr. Hess
- Need to get in title

Think in terms of Energy Storage not capacitance Can use sequential logic

Action Items:

- Create a timeline for the project
- Get registered for Expo
- Get a draft for the Snapshot presentation
- Proceed to make progress on technical part of project

# Lead Instructor and Technical Advisor Meeting 6 March 2015

Agenda for meeting:

- 1. Minutes from last meeting
- 2. EXPO Registration
- 3. Timeline rough draft
- 4. Snapshot rough draft

#### EXPO:

• Got confirmation on EXPO registration

Timeline:

- Have dates from website down
- Have certain milestones for events
- Look up Gantt Chart
- Events are points
- Activities take a certain amount of time, look like a horizontal bar chart
- This type of chart is open to change
- Should have a Gantt Chart on poster for Snapshot Day

Snapshot Day:

- Have something about charging the battery
- Numbers in specifications should have tolerance
- Project learning should be what we learned

EXPO will use a similar poster as Snapshot Day

Action Items:

- Create poster for Snapshot Day with Gantt Chart
- Check progress of O'Connor proposal
- Make technical progress

# Lead Instructor and Technical Advisor Meeting 27 March 2015

Review Meeting minutes from March 6<sup>th</sup>, 2015

Covered Snapshot likes and dislikes

Covered Gantt chart possibilities

Talked about Gantt chart (Showed Excel chart)

Talked about Sourcing Flyback Converter

Talked about Output for USB - response from Adafruit possible,

Talked about schedule

Deliverables for Next Meeting:

Update on parts acquisition

Decide on Design Review date

Schematic

Update Gantt chart/Timeline