Meeting minutes:

**Meeting** days: Mondays and Fridays during DPM class time

* Meeting with the **TA** every Tuesday at 3:00pm

**Meeting 0 : February 17, 2017 (10:25-11:34)**

* Coordination of the team schedule;
* Agreement on the date of the next meeting.

**Meeting 1 : February 20, 2017 (10:35-11:28)**

* Questionnaire (done)
* Allocate Resource - what to do (done)
* Decide roles for each member (done)

**\*Note:** We are meeting T.A **February 21st 2017 at 3:00pm**

**Roles:**

* Lead Software: Julien
* Software Engineers: Rami, Ali
* Lead Hardware: Romain, Philippe (Helper)
* Lead Testing: Ali
* Project Manager: Nayem
* Lead Documentation: Philippe, Nayem (Helper)

To do by next meeting:

* Sub-meeting for hardware/software (Tuesday around 2pm)
* Software: review lab 1-5 code, code design - Rami, Ali, Julien
* Hardware: overall design (idea), sketches? - Romain, Philippe
* Gantt Chart (review task list, build complete schedule of each task, Incorporate the milestones and verify the tasks deadlines accordingly) - Nayem (by tonight) - done
* Presentation key points - Nayem (by tonight) - done
* Timesheet setup - Nayem (during reading week) - done
* First 4 design docs - Posted on “documentation folder” (Everyone) - done

**Meeting 2 : February 21, 2017 (3:00pm-4:00pm, with TA)**

* T.A needs to verify with teacher what is the defense region: what is the offense region (done)
* TA: documentation is key
* Upload to DBOX: 4 docs, gantt chart, brief task list, initial design - Nayem (done)
* Edit and fix up gantt chart due tonight - Ali
* drawing of initial design due tomorrow before meeting with prof - Philippe
* Using 2 EV3 bricks
* Mass of slave: wall and launcher on the slave

**Submission 1:**

* Documentation: Power Point, 4 starting documents

**Meeting 3: February 22, 2017 (10:30am-10:50am)**

* Presentation went well.
* Upcoming targets:
  + Upload weekly timesheets on dropbox on tues before 5pm
  + Upload all scans and finish presentation powerpoint on tues before 5pm (EVERYONE must contribute)
  + Fix ganttchart: Change the load of everyone (i.e. how much they’ll be working on it, percentage), shorten the tasks to 2-3 days so you can add more later) - Ali and Nayem will work on this
  + By next meeting we should have a mechanical design chosen!

**Meeting 4: March 6, 2017 (10:35am-11:25am**)

* We will be using lab 5’s **RED & BLUE BALLS**
* Mechanical design chosen and built? - done
* “Document Edit History” folder on drive created; done on latex now and edit history can also be monitored via GitHub
* Robot tested with a sample code to shoot: Ball bounces at the fourth tile and then it’s in the air for two tiles and hits the target
* Make the robot’s shooter longer so it covers more distance
* NO MORE GROUP MEETINGS ON WEDNESDAYS
* Have questions ready for the TA
* Please log your hours on weekly timesheet, I will look at it at the end of every week and update the Global Timesheet based on it
* FOR SOFTWARE GUYS:
  + Make navigation class a thread
  + Not worth modifying the catapult class because ball size is not determine (yes it is, BLUE/RED BALL)
  + Some possibilities for Navigation class:
    - Move travelTo() logic to inside of thread run() class
    - If conditiional check for Boolean var and call travelTo() and then set boolean var to false

- Another possibility is to modify the navigation class to include obstacle avoidance

- Defender class logic still has to be written

- Navigation logic will execute in logic thread

- Summary for Navigation (ideas and possibilities)

- Navigation Thread

- Blocking logic inside main

- Move along x and y separately

- obstacle avoidance built in

- perform correction after every var call

- Line correction could be a problem because we don’t know how the math works

**Meeting 5 : March 07, 2017 (3:00pm-4:00pm, with TA)**

* Continue working on the class file and API docs and start at least one code

**Meeting 5: March 08, 2017 (10:30 - 10:50am, with prof. Lowther)**

* Work on gantt chart resources
* Record overtime hours
* Perhaps change design and use an elastic to shoot (Lowther suggestions)

**Meeting 6: March 13, 2017 (10:35 - 11:35am)**

* Need to redesign whole robot (hardware issues, Ali worked on the code)
* Working on redesigning the robot, now using elastic bands
* Philip - work on the 4 documents to edit and put them in the “V3” folder under Project->Documentation->V3: ALSO you can assign anyone to help you in doing the documents **(Due Wednesday 12PM) - Nayem** (Report changes to Nayem) - done
* Work on Gantt Chart - Nayem (fix days) - done
* New launcher design with elastic bands didn’t work too properly (ball is too heavy, speed is too fast + with some trials it still doesn’t work as expected)
* Ali - finished localizer, navigator, odometry, also the sensors now work as threads on their own.

**Meeting 7: March 16, 2017 (2:30 - 3:00pm)**

* Gantt chart good but need completion process done
* Everyone must put more time in this week!
* If localization doesn’t work: put it in documentation
* Testing Documents needed
* Hardware documents needed
* Software documents needed from github

**Meeting 8: March 17, 2017 (10:35 - 11:35am)**

* ***DEMO NEXT FRIDAY*** *(Navigation class(incorporate a beep sound when it goes to dispenser), Localization, Ball launcher)*
* Software team take care of software docs
* Ali - take out documents from github and put them on word, upload it to software folder
* Philippe - hardware docs & finish robot by friday (julien will help)
* Romain - crossbow design must be done by friday, or else we use the catapult mechanism
* Requirements doc doesn’t need to be updated, all other docs need editing
* Put in more hours
* Nayem - gantt chart completion, presentation material
* Ali - Put all the testing documents on google drive by saturday night

**Meeting 9: March 21, 2017 (2:30pm - 5:30pm)**

* Go over every single document
* Fix up powerpoint slides
* Do some trials with localizer
* Record results
* Final documents and everything updated
* Philippe will work on hardware and testing documents and submit it by thursday
* Rami, Ali, Romain and Julien will work on the robot’s code on thursday from 12pm
* Must get wifi code working
* Localizer must be accurate, should be around under 30 seconds
* Navigation should be done
* Documentation checked and updated based on today

**Meeting 10: March 24, 2017 (10:35am - 11:25am)**

**DAY OF DEMO**

* Verify every document is up to date - nayem
* Check other documents, contact teammates about software document - philippe
* Create a testing template - ali
* Software doc must be done and edited by next week - software team
* Presentation agenda updated
* Presentation to-do list updated

*TO DO FOR NEXT WEEK (final week):*

* Current status of the project, final steps before competition and we have to do budget summary of work to date, anticipated expenditure up to and including competition - Nayem
* Completion of hardware, software and testing documents - prepare brief summary of the state of each sector - Ali and Philippe
* Source Code - leave a copy of your **complete** source code in the dropbox - software team
* Discussion of any critical issues or details prior to the competition (whole team on monday meeting)
* Project poster design - philippe make preliminary sketch (by Saturday night), then Nayem make it on photoshop

**Meeting 11: March 27, 2017 (10:35am - 11:25am)**

**BEFORE TOMORROW**

* Finish coding the robot
* Finish hardware as early as possible
* Finish all the documents.

Meeting 12: April 3rd, 2017 (10:35am - 11:25am)

* Philippe - hardware doc almost done but need defense mechanism section TODAY
* Also put all excel data files on the docs
* Testing
  + 10 trials on ball hitting target (ball launcher)
  + 10 trials on localizing under 30 seconds
  + 10 trials on navigating (where it is on the board)
  + 10 trials on robot going to dispense and making a beep noise
  + 10 trials on navigating to the target and test the defense mechanism to see if it works

NOTE: there should be a total of 5 tests and 50 trials accordingly! (i.e. 5 excel sheets with results of the trials)

- in hardware doc, for all marks that have LDD files write at the end of it that “Please refer to LDD file \_\_\_\_”

- 3.4 Hardware doc, LDD section, instead of saying “for a couple of launcher…” say “for respective marks that are displayed below”

- Hardware appendices is done (make sure to merge to pdf’s together)

- HARDWARE DOC SHOULD BE GOOD - PROOFREAD NAYEM

- Nayem - check the testing doc and see if everything is intact and there

- Nayem - go to copiEUS and check if the poster size is good (36x24)

- Nayem - update GanttChart (updated)

- Defense Mechanism idea: Buy smores picks or brochette sticks (something light) - Julien speak to Romain about the idea - get receipt

- Print Poster - Nayem get receipt

- Tested already:

- Localization

- Ball launcher

- Wifi tested