
<table>
<thead>
<tr>
<th>Status:</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author:</td>
<td>Ali Javed</td>
</tr>
<tr>
<td>Created:</td>
<td>10/16/2012</td>
</tr>
<tr>
<td>Updated:</td>
<td>10/16/2012</td>
</tr>
<tr>
<td>Due date:</td>
<td>10/16/2012</td>
</tr>
<tr>
<td>Subject:</td>
<td>Weekly report 10-9-2012 to 10-16-2012</td>
</tr>
</tbody>
</table>

**Description:**
This week we finished the hardware of the test space. We first marked the floor in 2 ft x 2 ft squares with white paper tape, and built a 8 ft wood stand. The wood stand has a solid base so it is leveled, and is marked with 2 ft intervals.

The issue of matlab database creation is still pending but I did work on it. Here is my code.

```matlab
A = randi([1, 100])
B = randi([1, 100])
C = randi([13, 20])
D = randi([13, 20])

E = abs (A-B)
F = abs (A-C)
G = abs (A-D)
H = abs (B-C)
I = abs (B-D)
J = abs (C-D)

K = [E,F,G,H,I,J]
L = K
M = 1
PAUSE (30)
M = M + 1

A = randi([1, 100])
B = randi([1, 100])
C = randi([13, 20])
D = randi([13, 20])

E = abs (A-B)
F = abs (A-C)
G = abs (A-D)
H = abs (B-C)
I = abs (B-D)
J = abs (C-D)

O = ....
```

*LOOP PROBLEMS*

IT IS NOT EASY TO CREATE A LOOP IN MATLAB, SO FAR I HAVE NOT FOUND A WAY TO DO THIS, AND AM PRETTY SURE IT IS ALMOST IMPOSSIBLE. THEREFORE RIGHT NOW, I AM CONSIDERING TO STICK WITH CREATING THE DATABASE IN EXCEL. IT IS EASIER TO DO THAT, THAN TO RUN THE ABOVE CODE CONTINUOUSLY. I AM NOT SAYING THAT IT CAN'T BE DONE, BUT IF WE WANT TO CONTINUOUSLY BUILD THE DATABASE, I THINK ITS BEST TO CREATE IT IN EXCEL. THIS IS
JUST IN RELATION TO CREATING THE DATABASE, AS FAR AS THE ACTUAL CALCULATIONS GO, WE WILL DO THEM IN MATLAB. WE CAN EASILY READ THE DATA FROM EXCEL INTO MATLAB IN THE BEGINNING OF THE CODE, AND USE MATLAB TO DO THE EUCLIDEAN CALCULATIONS IN MATLAB. (FURTHER WORK IS STILL NEEDED ON THIS ISSUE, AND I AM WORKING ON IT)

OR.....

"WE CAN STILL USE THE ABOVE CODE TO BUILD THE DATABASE"

AS YOU CAN SEE I NEED TO DISCUSS THIS WITH MY GROUP MEMBERS, I GUESS WHAT WE CAN DO IS BUILD THE DATABASE IN EXCEL AND IN MATLAB.... JUST IN CASE ONE WORKS BETTER THAN THE OTHER!

GOALS FOR NEXT WEEK:
1) FINISH WRITING THE CODE FOR MATLAB/EXCEL DATABASE
2) CREATE THE PSEUDO CODE FOR THE PROGRAM THAT WILL BE RUN IN REAL TIME.
3) START BUILDING THE TIME-DELAY DATABASE