COMP2432 – Group Project Demonstration

Group Number	*Group Members:*
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Please complete the following tasks:

Task 1:

Take a video of your demonstration. The video should be no longer than five minutes and name it as "Video_**G00**.mp4" (where **G00** is your group number and "mp4" format is recommended).

Connect to department's server (apollo or apollo2). Create a directory and name it with your **group number**. The folder is used to store related materials of the project and the demonstration. It is then zipped and uploaded to the Blackboard after the demonstration. Download the source code file(s) from the Blackboard and save it to your **group folder**.

(Note: If the size of the video is too large, you must send us a valid link to download it.)

Task 2:

Compile your source code file(s) and name the binary file as "**RBMG00**" where "**G00**" is your group number. Start the application and execute the following:

a. ./**RBMG00**
b. addMeeting –tenant_A 2021-05-10 09:00 2.0 8;
c. endProgram;
d. Capture the screen of the execution and paste the picture at the end of this document (*Appendix C*).

Task 3:

Re-run the application and execute the following:

a. ./**RBMG00**
b. addMeeting -tenant_C 2021-05-10 10:00 7.0 19;
c. addConference -tenant_A 2021-05-12 11:00 8.0 3 webcam_FHD monitor_50;
d. addPresentation -tenant_D 2021-05-11 07:00 9.0 2 projector_4K screen_150;
e. addPresentation -tenant_D 2021-05-16 19:00 5.0 12 projector_4K screen_150;
f. addMeeting -tenant_E 2021-05-13 02:00 10.0 7 projector_4K screen_150;
g. addMeeting -tenant_A 2021-05-16 22:00 3.0 6;
h. addConference -tenant_E 2021-05-14 02:00 12.0 19 webcam_FHD monitor_50;
i. addPresentation -tenant_A 2021-05-13 04:00 4.0 6 projector_2K screen_100;
j. addPresentation -tenant_E 2021-05-10 00:00 1.0 7 projector_4K screen_150;
k. addMeeting -tenant_B 2021-05-13 05:00 2.0 3;
l. addPresentation -tenant_C 2021-05-13 07:00 6.0 13 projector_4K screen_150;
m. addPresentation -tenant_C 2021-05-15 17:00 7.0 7 webcam_UHD monitor_75;
n. addConference -tenant_D 2021-05-10 20:00 7.0 5 webcam_UHD monitor_75;
o. addMeeting -tenant_C 2021-05-11 18:00 9.0 18;
p. printBookings –fcfs;

Note 1: For "printBookings -**fcfs**", if you have not implemented the "first come first served" algorithm, simply replace it with the one which is implemented in your application. If you have implemented two or more algorithms, you need to generate all of them. Put all these output files to a sub-directory "**G00-Outputs**" under your group folder.
Note 2: Do not exit. The demo continues to do the following tasks.

```
   q. bookDevice -tenant_E 2021-05-15 00:00 11.0 screen_100;
   r. addBatch -rbmBatch.dat;
   s. printBookings –ALL;
   t. endProgram;
```

Stop taking the video.

Task 4 (*if applicable*):

If above tasks could not be done/finished properly, you might correct your source code and re-do above tasks again. For the revised source code, save it to a sub-directory **"Source Code"**.

Task 5:

Fill in the **"Contribution Table"** (*Appendix A of this document*).

Task 6:

Fill in the **"Future Study"** table (*Appendix B of this document*).

Task 7:

Save this document as "Demo_**G00**.docx" (where **G00** is your group number) to your group folder.

Task 8:

Zip the group folder and submit the zipped file to Blackboard.

- End of Demo -

Appendix A

Contribution Table

Student ID / Name	Description of Contribution	Percentage of Contribution & Signed
Wong Cheuk Fung 19099066D	1. Making report 2. debug	15% 
Leung Chun Kit 20037676D	1. Coding (mainly output part) 2. Algorithm design 3. Making report 4. debug	30% 
Wong Oi Ying 19063854D	1. Taking video 2. Making testing cases 3. Making readme 4. Making report	20% 
Ng Pui Shing 19052941D	1. Coding (mainly CLI and scheduling) 2. Algorithm design 3. debug	35% 

Appendix B

Future Study

Say something about your application, for example, the application could be improved/enhanced in such area(s)... And, how (in brief)?

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Scheduling algorithm</td><td>Our fcfs and priority algorithm not very effective, since we always assign the booking to the first free room/device and cannot be reschedule. So, in some case, like above.
<table>
<tr><td>Time slot</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr>
<tr><td>Room A</td><td>bk1</td><td>bk1</td><td></td><td>bk2</td><td>bk2</td><td>bk2</td></tr>
<tr><td>Room B</td><td></td><td></td><td>bk3</td><td>bk3</td><td></td><td></td></tr>
</table>
If booking4 want time slot 1 to 3. In optimal, bk2 can switch to room B, and bk3 can switch to room A, so that booking can use time slot 1 to 3 in room B.
Our algorithm could be improved to handle this case to make the utilization better. We can make our algorithm to check both room/devices simultaneously, when one of the room/devices is free of each requested time slot, the booking will be accepted.</td></tr>
</table>

Appendix C

Captured Screen

```
20037676d-apollo:/home/20037676d/COMP2432/project/G14$ ./RBMG14
Welcome to rbm!
> addMeeting -tenant_A 2021-05-10 09:00 2.0 8;

pending ...
> endProgram;

program ended
20037676d-apollo:/home/20037676d/COMP2432/project/G14$
```