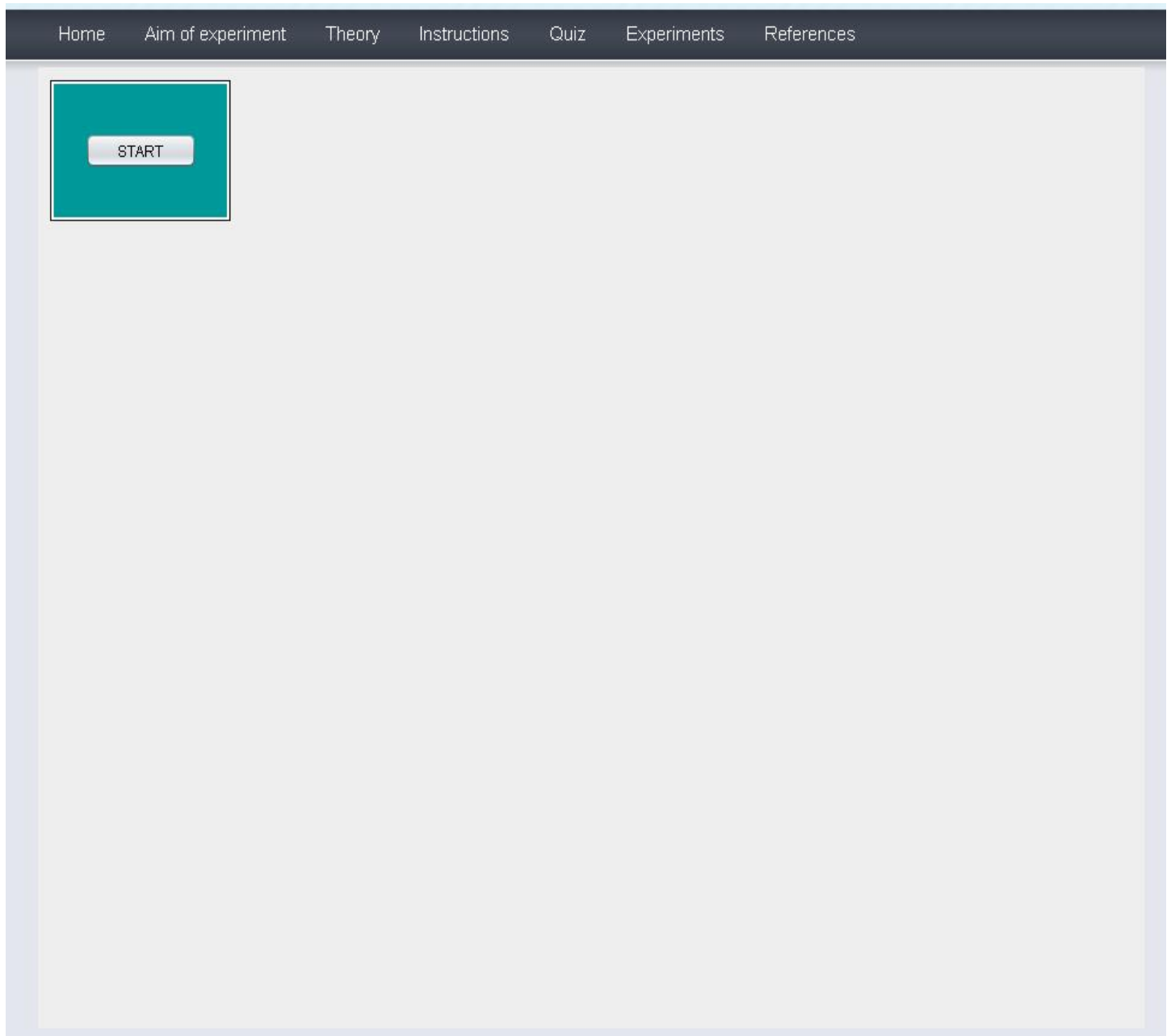


1 Instructions for Experiment 8:-Hand Off.

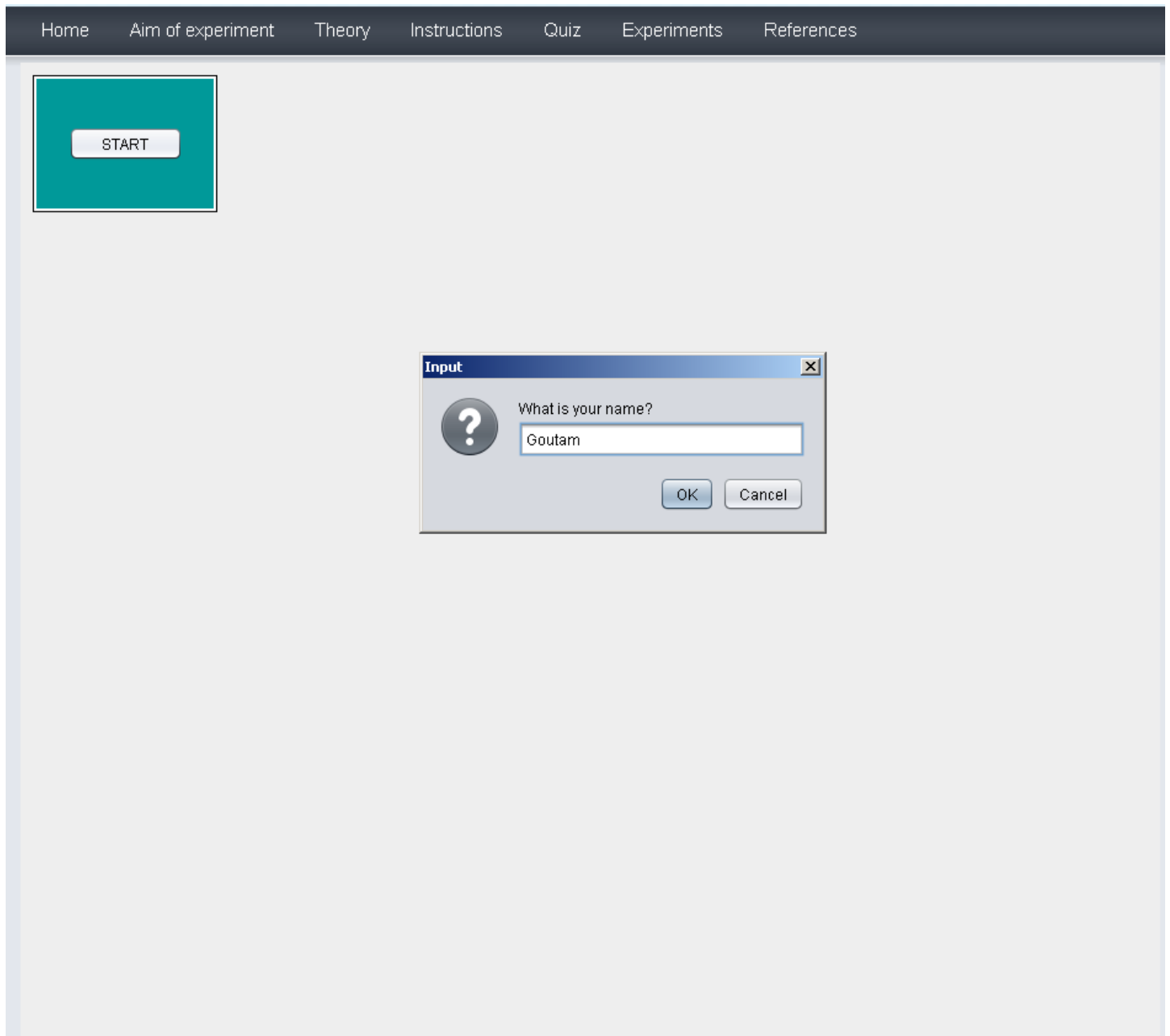
Follow the instructions given below to perform the experiment:-

1.1 Starting Experiment 8 :-

- Step1:- Click on the button START. A page appears with a dialogue box asking for your name.



- Step 2:- Enter your name then Click Ok.



- Step3:- Select the parameters (eg: Reuse ,Environment, Beamwidth,Carrier frequency etc) and enter your observation in the observation box.
- Step4:- Click on The "SUBMIT" button.

The interface displays a hexagonal grid of 25 cells, each containing a green antenna icon and a blue number (e.g., 21, 32, 41, 52, 61, 72 in the top row). The right panel contains the following settings:

- Run:** Run button
- Reuse:** 1
- Cell Radius(m):** 50
- Sectorized:** ☐ (disabled)
- Beam Width:** 70
- Rotate:** 30
- Vertical tilt:** 12
- Shadowing:** ☒
 - Sigma(dB):** 4
- Pt(dBm):** 34
- fc(GHz):** ...
- hT(m):** 10
- hRx(m):** 1
- NF(dB):** 7
- BW(MHz):** 5
- SNR(dB):** 5
- Alpha:** 0.1
- Delta 1:** 3
- Delta 2:** 3
- TimeSlot(s):** 20
- AvgTime(ms):** 12
- Mobile Speed(mps):** 50

Buttons: SET, START, RESET, REPORT.

Summary:

- SNR_l: 8.0 dB
- SNR_h: 11.0 dB
- Noise Power(dBm): -100.01
- Pr0(dBm): -95.01

Observation: Observation comes here [SUBMIT]

Name: GOUTAM	SNR(...)	CallID...	HOs	Del1	Del2	t(ms)	t_out...	% Out...	alpha
Pr:-4.290395269274818 dBm									
Dist:37.520827549509086 m									
No.Handoffs:0									
No.Calldrops:0									
Time:									
SNR(dB): -15.358082691674566									
Outage Time(ms):									

- Step5:- Click on The "START" button.
- Step6:- Observed the no.of call drops and no.of Hand Off.

The screenshot displays a cellular network simulation interface. The main area shows a hexagonal grid of base stations (BS) labeled 21 through 75. A mobile phone icon is positioned near BS 64. The interface includes a configuration panel on the right with various parameters and a results panel at the bottom left.

Configuration Panel (Right):

- Run:** Run button
- Reuse:** 1
- Cell Radius(m):** 50
- Sectored:** ☐
- Beam Width:** 70
- Rotate:** 30
- Vertical tilt:** 12
- Shadowing:** ☒
- Sigma(dB):** 4
- Pt(dBm):** 34
- fc(GHz):** ...
- hT(m):** 10
- hRx(m):** 1
- NF(dB):** 7
- BW(MHz):** 5
- SNR(dB):** 5
- Alpha:** 0.1
- Delta1:** 3
- Delta2:** 3
- TimeSlot(s):** 20
- AvgTime(ms):** 12
- Mobile Speed(mps):** 50
- Buttons:** SET, Start, RESET, REPORT

Observation Panel (Bottom Left):

Name: GOUTAM

Pr:-41.51597328030421 dBm
 Dist:50.72135891318371 m
 No.Handoffs:3
 No.Calldrops:3
 Time(ms): 15264
 SNR(dB): 7.030743245569633
 Outage Time(ms): 8064(52.83)

Table:

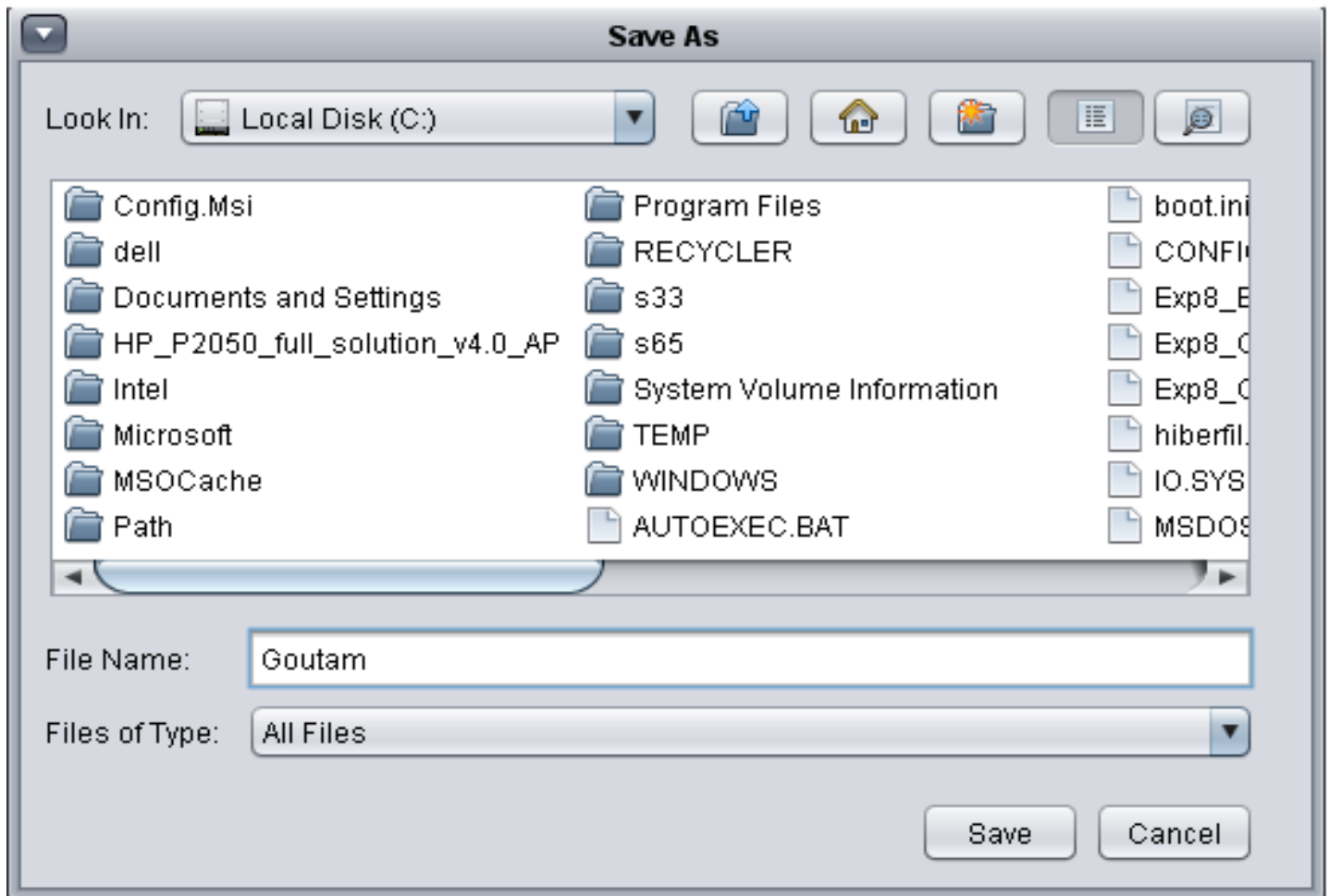
SNR(...)	CallID...	HOs	Del1	Del2	t(ms)	t_out...	% Out...	alpha
5	6.0	6.0	3	3	20016	11520	57.55	0.1
5	3.0	3.0	3	3	13104	8352	63.74	0.1
5	5.0	5.0	3	3	20016	11088	55.4	0.1
5	5.0	5.0	3	3	20016	9936	49.64	0.1
5	1.0	0.0	3	3	4176	2304	55.17	0.1
5	6.0	6.0	3	3	20016	9072	45.32	0.1
5	3.0	3.0	3	3	15264	8064	52.83	0.1

Summary Panel (Bottom Right):

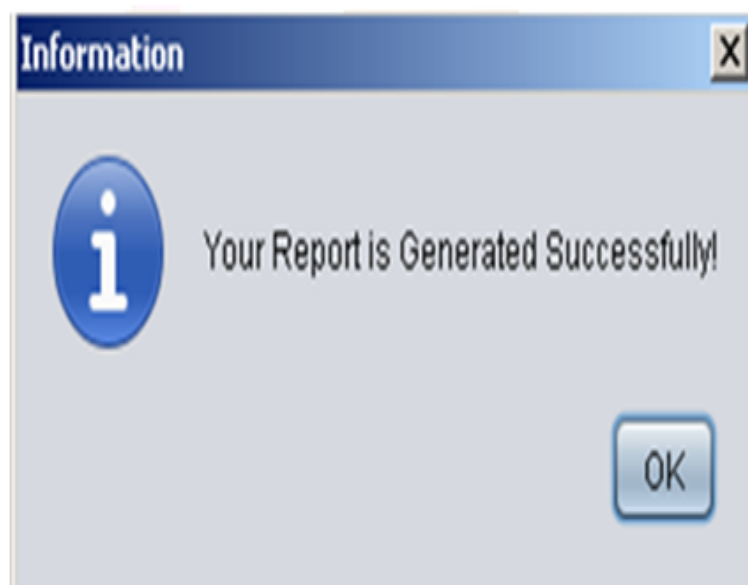
- SNR_l: 8.0 dB**
- SNR_h: 11.0 dB**
- Noise Power(dBm): -100.01**
- Pr0(dBm): -95.01**

- Step7:- Change the Parameters and observed the call drops and no.of Hand Off.

- Step8:- Click on the "Report" button to generate PDF report of the experiment.



- Step9:-After generation of the Report you will get following message.



- Step10:- Click on the "Ok" and you will get your Report.

Fading Channels & Mobile Communications

IIT Kharagpur

Date: Oct/15/2012

Exp 8: Handoff

Name: GOUTAM

Input Parameters	
Reuse: 1 ,Model: Runc	Pt(dBm): 34
fc(GHz): 0.8	Beam Width(deg): 70
Rotate(deg): 30	Cell Radius(m): 50
hT(m): 10	hM(m): 1
Sigma(dB): 4	Vertical Tilt(deg): 12
SNR(dB): 5	Band Width(MHz): 5
Noise Figure(dB): 7	Noise Power(dBm): -100.01
Pr0(dBm): -95.01	Time Slot(s): 20

Exp. Results								
SNR	No.Call dr ops	No.Hand offs	Delta1	Delta2	Reading Time(ms)	Outage Time(ms)	% Outage	Alpha
5.0	6.0	6.0	3.0	3.0	20016.0	11520.0	57.55	0.1
5.0	3.0	3.0	3.0	3.0	13104.0	8352.0	63.74	0.1
5.0	5.0	5.0	3.0	3.0	20016.0	11088.0	55.4	0.1
5.0	5.0	5.0	3.0	3.0	20016.0	9936.0	49.64	0.1
5.0	1.0	0.0	3.0	3.0	4176.0	2304.0	55.17	0.1
5.0	6.0	6.0	3.0	3.0	20016.0	9072.0	45.32	0.1
5.0	3.0	3.0	3.0	3.0	15264.0	8064.0	52.83	0.1

Observation
Observation comes here

(Signature of GOUTAM)

(Signature of Faculty)

- Step11:- To Redo the experiment click on "RESET" button.