

# INTEGRATED DESIGN PROJECT (IDP II) EXPERIMENT DESIGN DOCUMENT GOLF – SECTION A

**GROUP MEMBERS:** 

**TASNIA IQBAL: 201814030** 

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#### **Experiment Conduction Data Sheet:**

#### **AI Based Driver State Monitoring System:**

Task 01: Enter the Web App Task 02: Show Current State Task 03: Inattention Detection

Task 04: Disgust Detection

**Task 05: Drowsiness Detection** 

Task 06: Show Current Location and suggest parking spots

Participant Name: Aminul Islam

Task NO.	Task Completion Time	Success/ Fail	No. of action Requires Vs Expected	No. of Attempts
Task 1	5s	success	1/1	1
Task 2	7s	success	1/1	1
Task 3	2.5 min	success	4/2	3
Task 4	1 min	fail	2/2	4
Task 5	2 min	success	3/2	3
Task 6	10s	success	1/1	1

#### Participant Name: Lutfar Rahman

Task NO.	Task Completion Time	Success/ Fail	No. of action Requires Vs Expected	No. of Attempts
Task 1	7s	success	1/1	1
Task 2	10s	success	1/1	1
Task 3	1.5 min	fail	5/2	5
Task 4	2 min	fail	3/2	3
Task 5	57s	success	2/2	2
Task 6	8 s	success	1/1	1

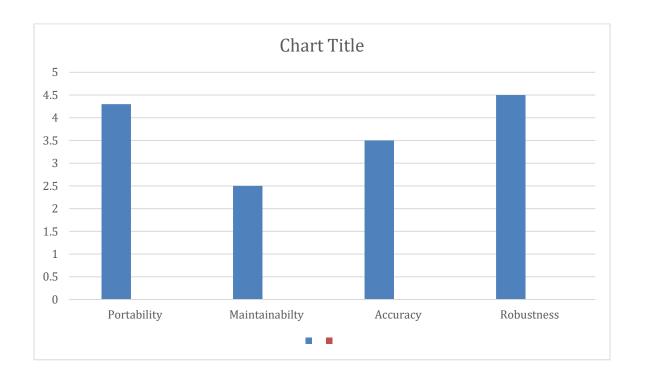
## Participant Name: Altaf Hossain

Task NO.	Task Completion Time	Success/F ail	No. of action Requires Vs Expected	No. of Attempts
Task 1	6s	success	1/1	1
Task 2	11s	success	1/1	1
Task 3	2 min	success	3/2	3
Task 4	1.5 min	Success	4/2	4
Task 5	3 min	fail	3/2	3
Task 6	15 s	success	1/1	1

Participant Name: Naim Hossain

Task NO.	Task Completion Time	Success/ Fail	No. of action Requires Vs Expected	No. of Attempts
Task 1	8s	success	1/1	1
Task 2	25s	fail	3/1	3
Task 3	2.1 min	success	4/2	3
Task 4	2.6 min	fail	2/2	4
Task 5	2 min	success	3/2	3
Task 6	10s	success	1/1	1

## **Evaluating Factors:**



# Post Questionnaires

Question	Answer	Participant Name
Do you think using OverSee will minimize the risks while you're driving on the road?	Yes	Aminul Islam
Do you think OverSee gives you accurate result when detecting the current states of the driver?	Yes	
Do you prefer alerting the user with the alarm system?	Yes	
Do you recommend others to use it?	Yes	

Question	Answer	Participant Name
Do you think using OverSee will minimize the risks while you're driving on the road?	Yes	Lutfar Rahman
Do you think OverSee gives you accurate result when detecting the current states of the driver?	Yes	
Do you prefer alerting the user with the alarm system?	Yes	
Do you recommend others to use it?	Yes	

Question	Answer	Participant Name
Do you think using OverSee will minimize	Yes	Altaf Hossain
the risks while you're driving on the road?		
Do you think OverSee gives you accurate	Yes	
result when detecting the current states of		
the driver?		
Do you prefer alerting the user with the	Yes	
alarm system?		
Do you recommend others to use it?	Yes	

Question	Answer	Participant Name
Do you think using OverSee will minimize the risks while you're driving on the road?	Yes	Naim Hossain
Do you think OverSee gives you accurate result when detecting the current states of the driver?	Yes	
Do you prefer alerting the user with the alarm system?	Yes	
Do you recommend others to use it?	Yes	

# Pre Questionnaires

Question	Answer	Participant Name
Do you want a dedicated device to monitor you while you are driving to ensure your safety?	Yes	Aminul Islam
If there was a dedicated device which will detect whether the driver is drowsy or inattentive and alert you accordingly, the rate of accidents will decrease enormously. Do you agree with the above statement?	Yes	
Have you ever faced any accident or a reckless or careless driver who might got you in a accident for the lack of conscoiusness?	no	
If you have faced this kind of situation do you think about the necessity of having this kind of device on your daily life?	Yes	

Question	Answer	Participant Name
Do you want a dedicated device to monitor you while you are driving to ensure your safety?	Yes	Lutfar Rahman
If there was a dedicated device which will detect whether the driver is drowsy or inattentive and alert you accordingly, the rate of accidents will decrease enormously.  Do you agree with the above statement?	Yes	
Have you ever faced any accident or a reckless or careless driver who might got you in a accident for the lack of conscoiusness?	Yes	
If you have faced this kind of situation do you think about the necessity of having this kind of device on your daily life?	No	

Question	Answer	Participant Name
Do you want a dedicated device to monitor you while you are driving to ensure your safety?	Yes	Altaf Hossain
If there was a dedicated device which will detect whether the driver is drowsy or inattentive and alert you accordingly, the rate	Yes	

of accidents will decrease enormously.  Do you agree with the above statement?	
Have you ever faced any accident or a reckless or careless driver who might got you in a accident for the lack of conscoiusness?	No
If you have faced this kind of situation do you think about the necessity of having this kind of device on your daily life?	Yes

Question	Answer	Participant Name
Do you want a dedicated device to monitor	Yes	Naim Hossain
you while you are driving to ensure your		
safety?		
If there was a dedicated device which will	Yes	
detect whether the driver is drowsy or		
inattentive and alert you accordingly, the rate		
of accidents will decrease enormously.		
Do you agree with the above statement?		
Have you ever faced any accident or a	Yes	
reckless or careless driver who might got you		
in a accident for the lack of conscolusness?		
If you have faced this kind of situation do you	Yes	
think about the necessity of having this kind		
of device on your daily life?		

## Result of evaluation study:

Task Name	Result of Task	Observational Time Period	
Task 01: Enter the Web App	100%	5.9±.38	
Task 02: Show Current State	95%	28 ± .63	
Task 03: Inattention Detection	85%	56 ± .21	
Task 04: Disgust Detection	75%	18 ± .17	
Task 05: Drowsiness Detection	85%	26 ± .19	
Task 06: Show Current	100%	10 ± .42	
Location and suggest parking			
spots			

Task	Number of attempt	Task completion time	Number of time asking help
Task 01: Enter the Web App	1 ±0	6.3 ± .98	0 ±0
Task 02: Show Current State	1 ±0	14 ± .48	0 ±0
Task 03: Inattention Detection	1.3 ±0	26.3 ± 1.64	0.6 ±0
Task 04: Disgust Detection	1.5 ±0	36.5 ± 1.3	0.8 ±0
Task 05: Drowsiness Detection	1.6 ±0	47 ± .65	0.3 ±0
Task 06: Show Current Location	1 ±0	15 ± 1.8	0 ±0
and suggest parking spots			

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