ID	WBS	Task Name	Duration	6	4th Qua				t Quarter	,   <sub>M</sub>	2nd Quarter			Brd Quarter			4th Quart
1	1	Automated Bus	247 days	Sep	Oct	Nov	De	.ec ∣ .	Jan F	eb Mar	Apr N	May .	Jun	Jul	Aug	Sep	Oct
2	1.1	Researching Information and Statistics	43 days		<b>—</b>		<b>-</b>										'
3	1.1.1	Meeting	5 days		Н												'
4	1.1.1.1	Kick Off Meeting	1 day		O												'
5	1.1.1.1.1	Participants introduction.	1 day														'
6	1.1.1.1.2	Present the project goals. In this case gathering information.	1 day														
7	1.1.1.3	Setting the objectives	1 day														'
8	1.1.1.1.4	Communication Plan.	1 day														'
9	1.1.1.1.5	Feedback and Closure.	1 day														'
10	1.1.1.2	Planning Meeting	1 day														'
11	1.1.1.2.1	Confirm objectives.	1 day														'
12	1.1.1.2.2	Develop the plan.	1 day		I												<b>'</b>
13	1.1.1.2.3	Assign roles and responsibilities.	1 day														'
14	1.1.1.2.4	Defining and assigning tasks.	1 day														'
15	1.1.1.2.5	Create requirement document and RTM.	1 day														'
16	1.1.1.3	Status Meeting	1 day														'
17	1.1.1.3.1	Project review.	1 day														'
18	1.1.1.3.2	Obtain current state of the project.	1 day														'
19	1.1.1.3.3	Identify bottlenecks.	1 day														[ '
20	1.1.1.3.4	Need for timeline changes.	1 day														'
21	1.1.1.3.5	Feedback and Closure	1 day														'
22	1.1.1.4	Review Meeting	1 day														'
23	1.1.1.4.1	Selecting certain milestones.	1 day														
24	1.1.1.4.2	Checking milestone status.	1 day														'
25	1.1.1.4.3	Discussing issues and lessons learned.	1 day														
26	1.1.1.4.4	Corrective actions.	1 day														
27	1.1.1.4.5	Updating milestone report.	1 day														
	1.1.1.5	Sign-Off Meeting	1 day														
29	1.1.1.5.1	Participants introduction.	1 day														
1				Pε	age 1												

ID	WBS	Task Name	Duration		4th Quar			1st Quar		1	2nd Quar			3rd Qua			4th Quart
30	1.1.1.5.2	Recap the information in the Requirements Report.	1 day	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
31	1.1.1.5.3	Check if all the all the requirements are met.	1 day														
32	1.1.1.5.4	Close the project if yes.	1 day														
33	1.1.1.5.5	Feedback and Closure.	1 day														
34	1.1.2	Interviews	14 days														
35	1.1.2.1	Stakeholder Identification	2 days		10												
36	1.1.2.1.1	Identifying people involving and affected by project.	1 day		ı												
37	1.1.2.1.2	Categorizing people.	1 day														
38	1.1.2.1.3	Formalizing Internal project stakeholders.	1 day														
39	1.1.2.1.4	Formalizing external project stakeholders.	1 day														
40	1.1.2.1.5	Update Stakeholder register.	1 day														
41	1.1.2.2	Prioritizing Stakeholders	3 days		н												
42	1.1.2.2.1	Perform Stakeholder Analysis.	1 day														
43	1.1.2.2.2	Perform Expert Judgment.	2 days														
44	1.1.2.2.3	Create stakeholders matrix.	2 days														
45	1.1.2.2.4	Assign priorities.	1 day														
46	1.1.2.2.5	Update Stakeholder register.	1 day														
47	1.1.2.3	Notifying Stakeholders	4 days		Н												
48	1.1.2.3.1	Obtain list of stakeholders.	1 day														
49	1.1.2.3.2	List out the platforms available for requesting stakeholder participation.	2 days		II												
50	1.1.2.3.3	Finalize the platform.	1 day														
51	1.1.2.3.4	Finalize the format for the notification.	2 days														
52	1.1.2.3.5	Request stakeholder for their participation.	1 day														
53	1.1.2.4	Request for appointment	2 days		10												
54	1.1.2.4.1	Obtain list of stakeholders participating.	1 day														
55	1.1.2.4.2	Create the interviews schedule.	1 day														
56	1.1.2.4.3	Request stakeholder for their participation from the schedule.	1 day														
				Pa	nge 2												

ID	WBS	Task Name	Duration		4th Quar	rțer		1st Qua			2nd Quar			3rd Quar	rțer		4th Qua	
	11211	Obtain the management	1 -1	Sep	Oct	Nov	Dec		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
	1.1.2.4.4	·	1 day															
	1.1.2.4.5	_	1 day		•													
59	1.1.2.5	Conduct Interview	5 days		Н													
60	1.1.2.5.1	Select the list people conducting interviews.	1 day															
61	1.1.2.5.2	Create the interview panels.	1 day															
62	1.1.2.5.3	Conduct interviews.	3 days		ll II													'
63	1.1.2.5.4	Log the responses from the stakeholders.	3 days		l II													'
64	1.1.2.5.5	Forward responses analysis.	2 days		ш													'
65	1.1.3	Surveys	13 days															'
66	1.1.3.1	Target User Base	2 days		M													'
67	1.1.3.1.1	Identifying people utilizing or affected by project.	1 day		ı													
68	1.1.3.1.2	Categorizing Users.	1 day															
69	1.1.3.1.3	Formalizing user base.	1 day															
70	1.1.3.1.4	Create users base matrix.	1 day															
71	1.1.3.1.5	Update Survey Tracker Doc.	1 day															
72	1.1.3.2	Narrow down User Base	3 days		н													
73	1.1.3.2.1	Perform User Base analysis.	1 day															
74	1.1.3.2.2	Prioritize the user present based on application functionality.	1 day		•													
75	1.1.3.2.3	Shortlist the users	1 day															
76	1.1.3.2.4	Set backup for the shortlisted users.	1 day															
77	1.1.3.2.5	Update Survey Tracker Doc.	1 day															
78	1.1.3.3	Prepare Survey	3 days		H													
79	1.1.3.3.1	Decide on what questions to be asked.	1 day		1													
80	1.1.3.3.2	Ratio of Open-ended & closed questions.	1 day		1													
81	1.1.3.3.3	Types of response formats.	1 day															
82	1.1.3.3.4	Layout of the questionnaire	1 day															
83	1.1.3.3.5	List platforms used for survey.	2 days		III.													
84	1.1.3.4	Finalize Survey	2 days		П													
				P	age 3													

ID	WBS	Task Name	Duration		4th Qua		1 _	1st Qua		1	2nd Quai		ı .	3rd Qua			4th Quart
85	1.1.3.4.1	Finalize questions to be asked.	2 days	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
86	1.1.3.4.2	Finalize Ratio of Open-ended & closed questions.	1 day		•												
87	1.1.3.4.3	Finalize responses formats.	1 day														
88	1.1.3.4.4	Finalize Layout of the questionnaire.	1 day														
89	1.1.3.4.5	Finalize platform used for survey.	1 day														
90	1.1.3.5	Organize Survey	6 days														
91	1.1.3.5.1	Notify users about the survey.	1 day														
92	1.1.3.5.2	Request user participation.	1 day														
93	1.1.3.5.3	Request the user for the best possible time for	1 day														
94	1.1.3.5.4	survey. Conduct survey.	3 days		ш												
	1.1.3.5.5	Update Survey Tracker Doc.	1 day														
	1.1.4	Prototyping	27 days		, ·		<b>,</b>										
	1.1.4.1	Plan and Develop	8 days			_	•										
	1.1.4.1.1	Define Objective.	1 day		'	•											
	1.1.4.1.1	Define Objective.  Define Scope.	-														
	_	·	1 day														
	1.1.4.1.3	Obtain sign-off from stakeholders.	1 day														
101	1.1.4.1.4	Modify objective or scope based on feedback.	1 day		'												
102	1.1.4.1.5	Develop prototype.	5 days														
103	1.1.4.2	Evaluating by Testing	5 days			Н											
104	1.1.4.2.1	Identify the data to be used.	1 day														
105	1.1.4.2.2	Modify the data as per the need.	1 day														
106	1.1.4.2.3	Define test scenarios.	2 days														
107	1.1.4.2.4	Execute test scenarios.	2 days														
108	1.1.4.2.5	Provide feedback.	1 day														
109	1.1.4.3	Evaluating By Users & Stakeholders.	7 days			П											
110	1.1.4.3.1	Identify users and stakeholder for evaluating.	1 day			1											
111	1.1.4.3.2	Request for their participation.	1 day														
				Pa	ige 4												

ID	WBS	Task Name	Duration		4th Quart		-	1st Qua		M	2nd Quar			3rd Qua			4th Quart
112	1.1.4.3.3	Provide them with necessary equipment.	2 days	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
113	1.1.4.3.4	Provide them with necessary documents.	2 days			11											
114	1.1.4.3.5	Request their feedback.	1 day														
115	1.1.4.4	Impact Assessment	5 days														
116	1.1.4.4.1	Obtain feedback from testing.	1 day														
117	1.1.4.4.2	Obtain feedback from user and stakeholder evaluation.	1 day			- 1											
118	1.1.4.4.3	Refine the things to be modified or added to the prototype.	1 day			- 1											
119	1.1.4.4.4	Obtain sign-off from stakeholders.	1 day														
120	1.1.4.4.5	Develop and evaluate prototype again.	3 days			11											
121	1.1.4.5	Finalize based on Evaluation.	3 days			Н											
122	1.1.4.5.1	Establish the prototype to be final.	1 day														
123	1.1.4.5.2	Obtain sign-off from stakeholders.	1 day														
124	1.1.4.5.3	Refine if any feedback provided.	1 day														
125	1.1.4.5.4	Update documents.	1 day														
126	1.1.4.5.5	Forward results for further analysis	1 day														
127	1.1.5	Statistics	37 days														
128	1.1.5.1	Gather Info on Need of this application	5 days		Н												
129	1.1.5.1.1	List of ways gather info.	1 day														
130	1.1.5.1.2	Organize Interviews.	2 days														
131	1.1.5.1.3	Conduct Surveys.	2 days														
132	1.1.5.1.4	Develop prototype.	2 days		ll ll												
133	1.1.5.1.5	Update Statistics report.	1 day														
134	1.1.5.2	Analysis Interviews	5 days		Н												
135	1.1.5.2.1	Obtain the log sheet of the responses received.	1 day		1												
136	1.1.5.2.2	Conduct a review meeting	2 days														
137	1.1.5.2.3	Show the stats in the meeting.	1 day														
138	1.1.5.2.4	Analyze the stats and Come up with closure.	1 day														
139	1.1.5.2.5	Update Statistics report.	1 day														
				Pa	age 5												

ID	WBS	Task Name	Duration		4th Quai			1st Qua		1	2nd Quar			3rd Quai		1 6	4th Quai	rt
140	1.1.5.3	Analysis Surveys	5 days	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	1
141	1.1.5.3.1	Obtain the Survey Tracker Doc.	1 day															
142	1.1.5.3.2	Conduct a review meeting	2 days															
143	1.1.5.3.3	Show the stats in the meeting.	1 day															
144	1.1.5.3.4	Analyze the stats and Come up with closure.	1 day															
145	1.1.5.3.5	Update Statistics report.	1 day															
146	1.1.5.4	Prototype Responses	4 days			Г	1											
147	1.1.5.4.1	Obtain the porotype evaluation report.	1 day															'
148	1.1.5.4.2	Conduct a review meeting.	2 days				ı											'
149	1.1.5.4.3	Obtain responses.	1 day			1	ı											
150	1.1.5.4.4	Check for any major design related feedback.	1 day				.											
151	1.1.5.4.5	Update Statistics report.	1 day															
152	1.1.5.5	Conclude Analysis	1 day															
153	1.1.5.5.1	Organize a Sign-Off meeting.	1 day				•											
154	1.1.5.5.2	Invite all the departments involved for the	1 day				•											
	<u> </u>	Information gathering task.																
	1.1.5.5.3	Proved the result of the actives conducted.	1 day															
	1.1.5.5.4	Justify the changes if any.	1 day				•											
	1.1.5.5.5	Feedback and Closure.	1 day				•											
158	1.2	Acquiring Equipment	94 days															
	1.2.1	Required Hardware	12 days															
160	1.2.1.1	Conduct a Kick Off Meeting	1 day															
161	1.2.1.1.1	Introduce the attendees.	1 day															
162	1.2.1.1.2	Explain project goals to attendees.	1 day															
163	1.2.1.1.3	Discuss project organizational structure.	1 day															
164	1.2.1.1.4	Create list of action items	1 day			ı												
165	1.2.1.1.5	Decide date and time of future meetings.	1 day															
166	1.2.1.2	Organize a Brainstorming Session for ideas	1 day															
167	1.2.1.2.1	Explain the project scope, time and cost goals to attendees in depth.	1 day			•												
				Pá	age 6													1
ı					900													

ID	WBS	Task Name	Duration	Sep	4th Quar Oct	ter Nov	Dec	1st Quar Jan	ter Feb	Mar	2nd Quart	er May	Jun	3rd Qua	irter Aug	Sep	4th Quart Oct
168	1.2.1.2.2	Discuss about similar projects by competitors.	1 day	<u> </u>	Oct	INOV	Dec	Jan	reb	IVIdi	<u>Apr</u>	iviay	Jun	<u>Jul</u>	Aug	Sep	OCC
169	1.2.1.2.3	Brainstorm ideas using mind mapping technique.	1 day			•											
170	1.2.1.2.4	Document those ideas in a word document.	1 day														
171	1.2.1.2.5	Decide date and time of future brainstorm sessions.	1 day			•											
172	1.2.1.3	Create a 'concept' design of the bus	8 days														
173	1.2.1.3.1	Refer doc from brainstorming.	1 day														
174	1.2.1.3.2	Acquire design specifications of existing UNC-C buses.	2 days														
175	1.2.1.3.3	Incorporate brainstormed ideas with the existing UNC-C bus design.	3 days			II											
176	1.2.1.3.4	Create a 3D 'concept' design	3 days														
177	1.2.1.3.5	Distribute the 'concept' design.	1 day														
178	1.2.1.4	Come up with a list of required hardware	3 days			11											
179	1.2.1.4.1	Refer the concept design.	1 day														
180	1.2.1.4.2	Have another brainstorming session to discuss how to implement the concept practically.	1 day														
181	1.2.1.4.3	Come up with list of hardware possibly required for our project.	2 days			ı											
182	1.2.1.4.4	Refine the list to exact HW required for our project with quantity.	2 days														
183	1.2.1.4.5	Discuss about vendors.	1 day														
184	1.2.1.5	Distribute workload amongst teams	2 days														
185	1.2.1.5.1	Organize a survey to identify strengths of members.	1 day														
186	1.2.1.5.2	See the results of the survey.	1 day														
187	1.2.1.5.3	Assign tasks to member of HW team according to their expertise.	1 day														
188	1.2.1.5.4	Document the teams in a word doc.	1 day			ı											
				Pa	nge 7												

ID	WBS	Task Name	Duration		4th Quarter		st Quarter		2nd Quart			3rd Quar			4th Quart
189	1.2.1.5.5	Contact H.R. to equalize the teams.	1 day	Sep	Oct Nov De	ec	Jan Fe	eb Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
190	1.2.2	Getting Required Hardware	16 days		<u> </u>										
191	1.2.2.1		4 days	-	н										!
192	1.2.2.1.1	Design advertisements specifying the required HW.	2 days		II .										
193	1.2.2.1.2	Identify popular magazines, newspapers and online forums.	2 days		II .										
194	1.2.2.1.3	Find about cost for publishing	1 day												
195	1.2.2.1.4	Contact and pay the media.	1 day												
196	1.2.2.1.5	Publish the advertisements.	1 day												
197	1.2.2.2	Receive responses from vendors	3 days		п										
198	1.2.2.2.1	Assign a member to take responses.	1 day		1										
199	1.2.2.2.2	Check email, fax and phone on daily basis.	3 days		<b>II</b>										
200	1.2.2.2.3	Document all responses in a word doc.	3 days		H I										
201	1.2.2.2.4	Group vendors according to their respective expertise.	3 days												
202	1.2.2.2.5	Publish this document to stakeholders.	1 day		•										
203	1.2.2.3	Short list vendors	3 days		m										
204	1.2.2.3.1	Refer the list of vendors.	2 days												
205	1.2.2.3.2	Research about vendors.	2 days												
206	1.2.2.3.3	Prioritize vendor list according to quality and popularity.	1 day		•										
207	1.2.2.3.4	Get inputs from stakeholders.	2 days												
208	1.2.2.3.5	Create a document with details of shortlisted vendors.	1 day		1										
209	1.2.2.4	Give response and Negotiate on price quotes	4 days		н										
210	1.2.2.4.1	Appoint a good negotiator and conservationist for this task.	1 day		•										
211	1.2.2.4.2	Call each short listed vendor.	2 days		II .										
212	1.2.2.4.3	Get price quotes.	2 days		III.										
213	1.2.2.4.4	Negotiate on price quotes,	2 days		II										
				Pag	ge 8										

ID	WBS	Task Name	Duration		4th Quar			1st Qua		l	2nd Quar			3rd Qua			4th Quart
214	1.2.2.4.5	Create a document having details of price quotes post negotiations.	1 day	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	<u>Jul</u>	Aug	Sep	Oct
215	1.2.2.5	Place an order for required hardware	4 days				Н										
216	1.2.2.5.1	Choose the vendors offering the best value for money.	1 day														
217	1.2.2.5.2	Create a formal quotation.	2 days				ш										
218	1.2.2.5.3	Send that quotation to all shortlisted vendors.	2 days														
219	1.2.2.5.4	Come up with terms and agreements for payment and supply.	1 day				•										
220	1.2.2.5.5	Place the final order.	1 day														
221	1.2.3	Installing and Configuring HW	21 days				-										
222	1.2.3.1	Verify and update order	2 days				m										
223	1.2.3.1.1	Receive shipment of HW at Prospector.	1 day														
224	1.2.3.1.2	Verify the consignment.	1 day														
225	1.2.3.1.3	Notify the vendor in case of any discrepancies or issues.	1 day														
226	1.2.3.1.4	Send an updated order in case more HW is required.	1 day														
227	1.2.3.1.5	Update the order.	1 day														
228	1.2.3.2	Store acquired HW in warehouse	3 days				ı	l									
229	1.2.3.2.1	Assign on-campus logistics staff.	1 day														
230	1.2.3.2.2	Transfer the HW from shipment location to a UNC-C truck.	1 day														
231	1.2.3.2.3	The truck will transit the equipment to our warehouse.	1 day														
232	1.2.3.2.4	At the warehouse store the equipment according to categories. (GPS,Sensors etc)	2 days					l									
233	1.2.3.2.5	Create a log of what comes in the warehouse.	1 day					l									
234	1.2.3.3	Transfer HW from warehouse to mechanical workshop based on demand	2 days					00									
<u></u>																	
				Pa	age 9												

ID	WBS	Task Name	Duration			h Quarțe		1		t Quar			2nd Quar			3rd Qua		1		lth Quart
225	12221		4 -1	Sep	<u></u>	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	<u></u>	Oct
	1.2.3.3.1	required HW.	1 day						•											
236	1.2.3.3.2	Search the warehouse for required HW.	1 day																	
237	1.2.3.3.3	Sort and transfer the HW in a truck.	1 day																	
238	1.2.3.3.4	Truck will transit the data to the mechanical workshop.	2 days																	
239	1.2.3.3.5	Create a log of what goes out of the warehouse.	1 day						ı											
240	1.2.3.4	Install HW in buses	12 days							7										
241	1.2.3.4.1	Assign a mechanic team to work.	10 days																	
242	1.2.3.4.2	Refer the 'concept' designs.	10 days																	
243	1.2.3.4.3	Read instructions from vendors.	10 days																	
244	1.2.3.4.4	Install the hardware.	10 days							1										
245	1.2.3.4.5	Create a check log of what parts are installed on what buses.	4 days																	
246	1.2.3.5	Configure HW in buses	4 days							П										
247	1.2.3.5.1	Assign an engineer to configure HW.	3 days							II										
248	1.2.3.5.2	Configure the HW to work with UNCC buses.	3 days							II										
249	1.2.3.5.3	Test and verify the configuration.	3 days							II										
250	1.2.3.5.4	Report any issues if encountered.	2 days																	
251	1.2.3.5.5	Create a report specifying details of any issues.	1 day							ı										
252	1.2.4	Testing The HW	42 days																	
253	1.2.4.1	Meeting to decide test plan	5 days							П										
254	1.2.4.1.1	Send invites to the testing team.	1 day																	
255	1.2.4.1.2	Review the report from the hardware configuration team.	2 days																	
256	1.2.4.1.3	Create test cases to test the buses.	4 days																	
257	1.2.4.1.4	Document any ideas from the meeting.	1 day																	
258	1.2.4.1.5	Decide date and time of future meetings.	1 day																	
259	1.2.4.2	Transfer the bus to the test facility	4 days							П	i									
260	1.2.4.2.1	Drive the buses to the testing facility.	3 days																	
				Pē	age 1	10														

ID	WBS	Task Name	Duration	C	4th Qua		D	1st Qua		1 24-11	2nd Quar		l	3rd Qua			4th Qua	
261	1.2.4.2.2	2 Store the buses in storage.	1 day	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
262	1.2.4.2.3	Receive request from testing team.	1 day					1										'
263	1.2.4.2.4	Transfer the bus to the testing bay.	1 day															'
264	1.2.4.2.5	Store the bus in testing bay.	1 day															'
265	1.2.4.3	Perform the tests in testing field	18 days															'
266	1.2.4.3.1	Take the bus to the testing field.	1 day															
267	1.2.4.3.2	Perform mechanical tests.	5 days															'
268	1.2.4.3.3	Perform emission tests.	6 days															'
269	1.2.4.3.4	Perform safety tests.	5 days															
270	1.2.4.3.5	Record test results.	2 days															'
271	1.2.4.4	Fix issues	10 days						ľ									
272	1.2.4.4.1	Review the test results log.	3 days						-	ı								
273	1.2.4.4.2	Assign a repair team.	1 day															
274	1.2.4.4.3	Identify and record the issue.	1 day															'
275	1.2.4.4.4	Fix the issue.	7 days															
276	1.2.4.4.5	Create a log of fixed issues and unrepairable issu	ies. 1 day							1								
277	1.2.4.5	Manage issues with Failed hardware	5 days							П								
278	1.2.4.5.1	Review the log of unrepairable issues.	2 days															
279	1.2.4.5.2	Verify the failed HW.	2 days							Ш								
280	1.2.4.5.3	3 Create a return request.	1 day															
281	1.2.4.5.4	Ship the failed HW.	2 days															
282	1.2.4.5.5	Get the replacement.	1 day															'
283	1.2.5	Future Scope & Upgrades	31 days							1								'
284	1.2.5.1	R&D Meeting	6 days															
285	1.2.5.1.1	Invite people to the meeting.	1 day															
286	1.2.5.1.2	Review current status.	2 days															
287	1.2.5.1.3	Brainstorm upgrade ideas.	2 days					II										
288	1.2.5.1.4	Create a research and development plan.	2 days															
289	1.2.5.1.5	Decide date and time of future meetings.	1 day															
290	1.2.5.2	Perform the research	5 days						7									
				Pa	age 11													7

ID	WBS	Task Name	Duration	Sep	4th O	Quarter ct Nov	Dec	1st Qua	rter Feb	Mar	2nd Quar	ter May	lup	3rd Qua	arter Aug	Sep	4th Qua	ırt
291	1.2.5.2.1	Review R&D plan.	2 days	Seb		CT   INOV	Dec	JdII	reb	IVIdI	Apr	IVIay	Jun	_ Jui	Aug_	Sep	<u> </u>	
292	1.2.5.2.2	Record Statistics.	1 day															'
293	1.2.5.2.3	Review data from statistics.	2 days															'
294	1.2.5.2.4	Review latest technologies in the market.	3 days															'
295	1.2.5.2.5	Create upgrade plan	1 day															'
296	1.2.5.3	Determine upgrades	5 days						Н									'
297	1.2.5.3.1	Review the development and upgrades plan.	2 days															'
298	1.2.5.3.2	Verify if the upgrades are feasible.	1 day															"
299	1.2.5.3.3	Approve the feasible upgrades.	2 days						Ш									
300	1.2.5.3.4	Inform the research team about budget.	1 day															
301	1.2.5.3.5	Create upgrades report.	1 day															'
302	1.2.5.4	Perform upgrades	5 days						П									'
303	1.2.5.4.1	Review report.	1 day															'
304	1.2.5.4.2	Identify vendors.	1 day															'
305	1.2.5.4.3	Create order.	1 day															
306	1.2.5.4.4	Place order.	1 day															"
307	1.2.5.4.5	Install upgrades.	3 days															
308	1.2.5.5	Test upgrades	15 days							l								
309	1.2.5.5.1	Create a test plan.	2 days						u									'
310	1.2.5.5.2	Perform tests.	5 days															
311	1.2.5.5.3	Record results.	5 days															'
312	1.2.5.5.4	Identify Issues.	1 day															'
313	1.2.5.5.5	Fix issues.	8 days							l								
314	1.3	Programming and Installing Software	119 days													1		'
315	1.3.1	Requirements Gathering	27 days								<del></del> 1							
316	1.3.1.1	Conduct an explanation meeting	4 days							Н								
	1.3.1.1.1	·	1 day															'
318	1.3.1.1.2	Invite participants.	2 days															
319	1.3.1.1.3	Introduce particiapants.	1 day															
320	1.3.1.1.4	State project goals and objectives.	1 day															
				P;	age 12	<u>2</u>												'

ID	WBS	Task Name	Duration	Con	4th Quarter Oct Nov De	1st Qua		Mar	2nd Quarter	Iu		Quarter	6		4th Quart
321	1.3.1.1.5	Document the discussions in a word document.	1 day	Sep	Oct Nov De	ec Jan	Feb	Mar I	Apr M	ay Ju	n Ju	l Au	ug Se	Sep	Oct
322	1.3.1.2	Decide on best development approach	9 days					_	1					ĺ	'
	1.3.1.2.1		2 days					-	-					ĺ	'
	1.3.1.2.2		5 days						l					ĺ	
	1.3.1.2.3		2 days					_	' 					ĺ	'
	1.3.1.2.4		1 day						•					ĺ	'
	1.3.1.2.5	·	1 day						ı					Í	
	1.3.1.3		5 days						П					í	!
	1.3.1.3.1		1 day											ĺ	
	1.3.1.3.2	-	2 days											í	
331	1.3.1.3.3	-	1 day						1					í	
332	1.3.1.3.4	Get user feedback.	2 days											í	
333	1.3.1.3.5	Note down the ideas.	1 day						1					í	
334	1.3.1.4	Create a software requirements specification report	5 days						П					ĺ	
335	1.3.1.4.1	Review ideas.	1 day						1					ĺ	
336	1.3.1.4.2	Choose the best ideas.	2 days						Ш					Í	!
337	1.3.1.4.3	Choose the best ideas.	2 days											ĺ	
338	1.3.1.4.4	Decide a general format for the report.	1 day											í	
339	1.3.1.4.5	Make the report.	1 day											í	
340	1.3.1.5	Divide the workload amongst teams	7 days											í	
341	1.3.1.5.1	Identify skills required for development.	2 days											í	!
342	1.3.1.5.2	Conduct a survey to identify skillset of employees.	3 days						ш					ĺ	
343	1.3.1.5.3	Select the best teams based on skillset.	2 days											ĺ	
344	1.3.1.5.4	Forward a copy of requirements report.	1 day						1					í	
345	1.3.1.5.5	Note down the workload division.	1 day						1					Í	
346	1.3.2	Planning	16 days											í	
347	1.3.2.1	Planning poker meeting	2 days						M					í	
348	1.3.2.1.1	Assign a meeting location.	1 day												
				Pag	ge 13										

ID	WBS	Task Name	Duration	Sep	4th Quarter Oct	Nov   D	Dec 1	1st Quarter Jan		Mar	2nd Quar Apr	ter May	Jun	3rd Qu	arter Aug	Sep	4th Qua	art
349	1.3.2.1.2	Assign a meeting time.	1 day	Зер	OCT 1	NOV   L	Jec	Jan	reb	IVIAI	Aþi	iviay	Juli	Jui	Aug	Зер	Oct	-
350	1.3.2.1.3	Identify the attendees.	1 day															
351	1.3.2.1.4	Notify meeting attendees of location/time	1 day															
352	1.3.2.1.5	Send formal invitations.	1 day															
353	1.3.2.2	Organize story tasks	5 days								Н							
354	1.3.2.2.1	Read all story tasks.	1 day															
355	1.3.2.2.2	Organize by assigning numbers.	2 days															
356	1.3.2.2.3	Organize by assigning names.	2 days															
357	1.3.2.2.4	Upload story task to storyboard.	1 day															
358	1.3.2.2.5	Record story tasks in a document.	1 day															
359	1.3.2.3	Size story tasks	3 days								Г	I						
360	1.3.2.3.1	Log onto planning poker/distribute planning poker cards	1 day								•							
361	1.3.2.3.2	Read one story to group	1 day									I						
362	1.3.2.3.3	Ask any questions about the story	1 day									l						
363	1.3.2.3.4	Each member sizes the story	1 day								1	I						
364	1.3.2.3.5	Record in a document.	1 day								1	ı						
365	1.3.2.4	Record story tasks	3 days									H						
366	1.3.2.4.1	Record each members story size	1 day															
367	1.3.2.4.2	Come to a group consensus	1 day															
368	1.3.2.4.3	Record group consensus	1 day															
369	1.3.2.4.4	Create summary of recorded story tasks	1 day															
370	1.3.2.4.5	Email team members the summary of recorded	1 day															
		story tasks																
	1.3.2.5	Update story tasks	3 days									П						
	1.3.2.5.1	Review the story tasks.	1 day															
	1.3.2.5.2	Do discsussions on story tasks.	1 day															
	1.3.2.5.3	Identify issues with story tasks.	1 day															
	1.3.2.5.4	Update story tasks to fix issues.	1 day															
	1.3.2.5.5	Email team members about changes.	1 day															
377	1.3.3	Development	51 days															_
				Pag	je 14													

ID	WBS	Task Name	Duration	Cara	4th Quarter	D	1st Qua		NA	2nd Quar		l	3rd Qu	1	6	4th Quart
378	1.3.3.1	Develop Sensing and Simulation	7 days	Sep	Oct Nov	Dec	: Jan	Feb	Mar	Apr	May 📕	Jun	Jul	Aug	Sep	Oct
379	1.3.3.1.1	Review the requirments report.	1 day								1					!
380	1.3.3.1.2	Dsign user interface.	1 day								1					!
381	1.3.3.1.3	Code the program.	4 days													!
382	1.3.3.1.4	Link the user interface to program.	1 day													!
383	1.3.3.1.5	Optimise the code.	1 day													!
384	1.3.3.2	<b>Create Audio and Visual Notifications</b>	8 days													!
385	1.3.3.2.1	Review the requirements report.	1 day													'
386	1.3.3.2.2	Design the user interface.	1 day													'
387	1.3.3.2.3	Code the program.	4 days													'
388	1.3.3.2.4	Link the User Interface to program.	1 day													'
389	1.3.3.2.5	Optimise the code.	1 day													
390	1.3.3.3	Create Command Centre Module	8 days								r	<b>—</b>				
391	1.3.3.3.1	Review the requirements report.	1 day													
392	1.3.3.3.2	Design the user interface.	1 day									l				!
393	1.3.3.3.3	Code the program.	4 days								I					
394	1.3.3.3.4	Link the user interface to program.	1 day													
395	1.3.3.3.5	Optimise the code.	1 day													
396	1.3.3.4	Integrate Modules	22 days													
397	1.3.3.4.1	Gather modules from different teams.	4 days													
398	1.3.3.4.2	Perform unit integration.	10 days													
399	1.3.3.4.3	Intergrate the modules.	5 days													
400	1.3.3.4.4	Note down any issues with integration.	2 days													
401	1.3.3.4.5	Forward the issues to programming team.	1 day													
402	1.3.3.5	Develop Software Failue Risk Management Plan	7 days													
403	1.3.3.5.1	Review the potential risks.	5 days													
404	1.3.3.5.2	Setup a backup server at the command centre.	5 days													
405	1.3.3.5.3	Test the bus for software issues.	5 days													
406	1.3.3.5.4	Establish wireless connection.	5 days													
407	1.3.3.5.5	Grant permission to backup server to takeover.	2 days													
					ne 15											

ID	WBS	Task Name	Duration		4th Quarter	1 -	1st Qu		1	2nd Quar			3rd Qu			4th Quart
408	1.3.4	Installing	29 days	Sep	Oct Nov	Ded	<u>Jan</u>	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
409	1.3.4.1	Transfer the buses to installation lab	4 days										г	٦		
410	1.3.4.1.1	Select the bus for installation.	1 day													
411	1.3.4.1.2	Move the bus from storage area to installation	1 day											ı		
		area.														
412	1.3.4.1.3	Choose the lab for installation.	2 days											1		
413	1.3.4.1.4	Move the bus to exact lab.	1 day											1		
414	1.3.4.1.5	Create a bus entry/exit log.	1 day											I		
415	1.3.4.2	Verify if bus is ready for installation	3 days											П		
416	1.3.4.2.1	Check functionality of Engine Control Unit.	2 days													
417	1.3.4.2.2	Check functionality of sensors.	2 days													
418	1.3.4.2.3	Check funcationality of GPS.	2 days													
419	1.3.4.2.4	Check mechanical functionalities.	2 days													
420	1.3.4.2.5	Report issues to hardware team.	1 day													
421	1.3.4.3	Install the software on bus	14 days													
422	1.3.4.3.1	Identify the bus Engine Control Unit.	1 day													
423	1.3.4.3.2	Disassemble the Engine Control Unit from bus.	3 days											II		
424	1.3.4.3.3	Connect it to the Computer.	4 days													
425	1.3.4.3.4	Perform the software installation.	4 days													
426	1.3.4.3.5	Reinstall the engine control unit in bus.	3 days													
427	1.3.4.4	Install the command centre software	8 days												1	
428	1.3.4.4.1	Remotely connect the lab to command centre.	1 day													
429	1.3.4.4.2	Identify and choose the computer for command centre.	2 days											Ш		
430	1.3.4.4.3	Install the software in the specific computer.	2 days													
431	1.3.4.4.4	Test the software.	3 days													
432	1.3.4.4.5	Record any issues if encountered.	3 days													
433	1.3.4.5	Transfer the buses back to storage area	1 day													
						·										

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ID	WBS	Task Name	Duration		4th Quar			1st Qua		1	2nd Quar			3rd Qu		6	4th (	
434	1.3.4.5.1	Move the bus from installation lab to parking lot.	1 day	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	<u>Jul</u>	Aug	Se	ib O	<u>t  </u>
435	1.3.4.5.2	Drive the bus back to storage area.	1 day															
436	1.3.4.5.3	Park the bus in the storage area.	1 day															
437	1.3.4.5.4	Update the bus entry/exit log at storage area.	1 day															
438	1.3.4.5.5	Update the bus entry/exit log at lab.	1 day															
439	1.3.5	Setting Up Command Centre	60 days															
440	1.3.5.1	Identify the location	11 days															
441	1.3.5.1.1	Review the university's computer labs.	1 day															
442	1.3.5.1.2	Identify the lab with best specifications for the project.	2 days									ш						
443	1.3.5.1.3	Take permission for using the lab as command centre	3 days									U						
444	1.3.5.1.4	Assign command centre staff.	2 days															
445	1.3.5.1.5	Note down the specifics of command centre.	5 days															
446	1.3.5.2	Setup the equipment	21 days															
447	1.3.5.2.1	Install desktop computers.	5 days										l					
448	1.3.5.2.2	Install servers.	10 days									1						
449	1.3.5.2.3	Install backup server.	10 days									1						
450	1.3.5.2.4	Install visual display for navigation of buses.	15 days									ı						
451	1.3.5.2.5	Setup internet connectivity	5 days															
452	1.3.5.3	Manage Risk for Revocation of Command Centre	2 days											1				
453	1.3.5.3.1	Review the permission from university.	1 day											l				
454	1.3.5.3.2	Renew the permission if expired.	1 day											l				
455	1.3.5.3.3	Find a new computer lab on campus.	1 day											l				
456	1.3.5.3.4	Find a new command centre location off campus	1 day											I				
457	1.3.5.3.5	Assign a new command centre staff if needed.	1 day										I					
458	1.3.5.4	Maintenance of Command Centre	10 days											Н				
				Pa	ge 17													

ID	WBS	Task Name	Duration	Sep	4th Qua Oct	arter Nov	Dec	1st Qu Jan	arter Feb	Mar	2nd Quarte	r May	Jun 3	rd Quarter	ug Ser	4th Qua	rt
459	1.3.5.4.1	Verify the functioning of hardware and software.	2 days	Зер		INOV	Dec	Jan	160	IVIai	Api	Iviay 1	Juli	Jul   Au	ug Se	)   Oct	1
460	1.3.5.4.2	Identify issues with hardware and software.	2 days														'
461	1.3.5.4.3	Report the issues to the maintenance team.	2 days														'
462	1.3.5.4.4	Fix the issues with software.	2 days														'
463	1.3.5.4.5	Replace the malfunctioning hardware.	5 days														'
464	1.3.5.5	Training of Command Centre Staff	16 days											$\square$			'
465	1.3.5.5.1	Handout surveys to all current employees.	1 day														'
466	1.3.5.5.2	See the results of the survey.	1 day														'
467	1.3.5.5.3	Identify and note down the strengths and weaknesses of employees.	3 days											ш			
468	1.3.5.5.4	Organize training sessions for weak skill sets.	10 days														'
469	1.3.5.5.5	Validate the training done by handing out quizes.	2 days														
470	1.4	Legal Permits	129 days														'
471	1.4.1	Discussion about legal issues	39 days									1					'
472	1.4.1.1	Meet with team	1 day														'
473	1.4.1.1.1	Setup a meeting	1 day														
474	1.4.1.1.2	Setup an agenda for meeting	1 day														'
475	1.4.1.1.3		1 day														'
476	1.4.1.1.4	Identify legal issues	1 day														
477	1.4.1.1.5	List out critical points	1 day														
478	1.4.1.2	Meet legal expert in university	1 day														
479	1.4.1.2.1	Setup meeting with university legal expert	1 day														
480	1.4.1.2.2	Explain the project	1 day														
481	1.4.1.2.3	Get an idea about legal issues	1 day														
482	1.4.1.2.4	Discuss solutions	1 day							1							
483	1.4.1.2.5	List out favorable solutions	1 day							1							
484	1.4.1.3	Check out lawyers	23 days														
485	1.4.1.3.1	Check out the legal issues that pertain	2 days														
486	1.4.1.3.2	Check lawyers that are into these issues	5 days														
				Pa	ge 18												-

ID	WBS	Task Name	Duration	Sep	4th Quar Oct	ter Nov	Dec	1st Qua	arter Feb	Mar	2nd Quarter Apr Ma	y Jun	3rd Qua	arter Aug	Sep	4th Quart Oct
487	1.4.1.3.3	List out favourable lawyers	10 days	3ch	Oct	INOV	Dec	. Jan	FED	IVIai	Αρι ινια	y   Jun	Jui	_   Aug	3eh	_ Oct
488	1.4.1.3.4	Show the team the list	3 days								II					
489	1.4.1.3.5	Discuss with team	3 days													
490	1.4.1.4	Meeting lawyers	13 days													
491	1.4.1.4.1	Get contacts of all lawyers	3 days													
492	1.4.1.4.2	Send them a request for meeting	2 days													
493	1.4.1.4.3	Setup meetings with them	5 days													
494	1.4.1.4.4	Discuss our issues	2 days													
495	1.4.1.4.5	List out the discussions with each lawyer	2 days													
496	1.4.1.5	Finalizing lawyer	1 day								П					
497	1.4.1.5.1	Call meeting with team	2 days													
498	1.4.1.5.2	Show them solutions provided by each lawyer	2 days								ш					
499	1.4.1.5.3	Discuss pros/cons for each	2 days								II					
500	1.4.1.5.4	Discuss which lawyer is suitable	2 days								II					
501	1.4.1.5.5	Finalise and select one lawyer	2 days								III					
502	1.4.2	Permit from university and DMV	22 days													
503	1.4.2.1	Meeting legal team from university	6 days									Н				
504	1.4.2.1.1	Setup meeting with legal team from university	1 day									•				
505	1.4.2.1.2	Get idea of issues that university can have	2 days													
506	1.4.2.1.3	Give legal solutions for it	2 days									111				
507	1.4.2.1.4	Get a reply from them for the same	3 days									II				
508	1.4.2.1.5	Record all the replies	2 days													
509	1.4.2.2	Meeting legal team from DMV	3 days									Н	I			
510	1.4.2.2.1	Setup meeting with legal team from DMV	1 day													
511	1.4.2.2.2	Explain the issues learnt from university	1 day													
512	1.4.2.2.3	Discuss the impact on the traffic	1 day													
513	1.4.2.2.4	Discuss the impact on safety of people	1 day										l			
514	1.4.2.2.5	Record their replies on the same	1 day										ı			
515	1.4.2.3	Meeting with the team	6 days										П			
				Pag	ge 19											

ID	WBS	Task Name	Duration	Sep	4th Quarte	er Nov	Dec	1st Qu		Mar	2nd Quarter Apr Ma	1	3rd Quarter	Sep	4th Quart Oct
516	1.4.2.3.1	Setup meeting with the team	1 day	Sep	OCL	INOV	Dec	. Jan	reb	IVIdI	Apr IVI	ay Jun	Jul Aug	Sep	OCT
517	1.4.2.3.2	Present the issues mentioned by university and DMV's team	2 days												
518	1.4.2.3.3	Check if there can be changes in feature to solve them	2 days										ı		
519	1.4.2.3.4	Check if they have any other suggestions	2 days									1	1		
520	1.4.2.3.5	Record the suggestions	2 days												
521	1.4.2.4	Meeting with lawyer	3 days										П		
522	1.4.2.4.1	Setup meeting with the lawyer	1 day												
523	1.4.2.4.2	Show the discussion with university and DMV's legal team	2 days										ш		
524	1.4.2.4.3	Explain the suggestions given by the team	2 days										H		
525	1.4.2.4.4	Get legal solutions from the lawyer	2 days										H		
526	1.4.2.4.5	Record these solutions	1 day										1		
527	1.4.2.5	Finalising permits from university and DMV	4 days										П		
528	1.4.2.5.1	Present solution given by lawyer	2 days										II .		
529	1.4.2.5.2	Get a reply regarding these solutions	2 days										II .		
530	1.4.2.5.3	Meet University and DMV's legal team with our lawyer	2 days										II		
531	1.4.2.5.4	Discuss about the permit required	2 days										II .		
532	1.4.2.5.5	Discuss the points that need to be included	2 days												
533	1.4.3	Signing Legal documents	18 days												
534	1.4.3.1	Meet with the lawyer	4 days										н		
535	1.4.3.1.1	Discuss with our lawyer what goes into the document	2 days												
536	1.4.3.1.2	Refer previous documents	1 day										1		
537	1.4.3.1.3	See if all leagl issues can be included	1 day										1		
538	1.4.3.1.4	See if there aren't any loop holes	1 day												
539	1.4.3.1.5	Finalise the document draft	1 day										1		
540	1.4.3.2	Review documents with university and DMV's legal team	5 days										Н		
<u> </u>															
				Pag	je 20										

ID	WBS	Task Name	Duration	Sep	4th Quart	ter Nov	Dec	1st Quar	ter Feb	Mar	2nd Quarte			l Quarter Jul Aug	Sep	4th Quart Oct
541	1.4.3.2.1	Setup meeting with legal team from university and DMV	2 days	sep	Oct	NOV	Dec	j Jan	reb	Iviai	Арг	iviay   J	Jun	M Aug	Зер	Oct
542	1.4.3.2.2	Present them with the draft	2 days													
543	1.4.3.2.3	Check if they require any additional points	2 days													
544	1.4.3.2.4	Discuss with lawyer if the addition is possible	1 day													
545	1.4.3.2.5	Make necessary Changes	2 days													
546	1.4.3.3	Finalising the changes	5 days											П		
547	1.4.3.3.1	Show chnaged document to university and DMV's legal team	2 days											ш		
548	1.4.3.3.2	Get an approval from them	2 days													
549	1.4.3.3.3	Take the document to the lawyer	2 days													
550	1.4.3.3.4	Record all the changes made to the document from the beginning to end	1 day											1		
551	1.4.3.3.5	Prepare the final draft of the document	1 day											1		
552	1.4.3.4	Prepare documents	1 day													
553	1.4.3.4.1	Call meeting with team	1 day											1		
554	1.4.3.4.2	Present document draft	1 day													
555	1.4.3.4.3	Get their take on the document	1 day													
556	1.4.3.4.4	Check if there are issues that can hinder the team technically	1 day											1		
557	1.4.3.4.5	Prepare the fina the document	1 day											I		
558	1.4.3.5	Sign Documents	3 days											ľ		
559	1.4.3.5.1	Take the document to the university expert and get an approval for it	1 day													
560	1.4.3.5.2	Discuss the issues we had between lawyer and university expert	1 day													
561	1.4.3.5.3	Take the document to the legal offices of the university and DMV	1 day											ı		
562	1.4.3.5.4	Take sign of the team on the legal document	1 day													
563	1.4.3.5.5	Take the document to the university and DMV's legal team for them to sign	1 day											1		
564	1.4.4	Software and hardware licenses	15 days												1	
				Pa	ge 21											

ID	WBS	Task Name	Duration		4th Quai				uarter	1	2nd Quar			3rd Qua			4th Quart
565	1.4.4.1	Contact hardware and software vendors	4 days	Sep	Oct	Nov	Dec	Jan	n Feb	) Mar	Apr	May	Jun	Jul	Aug   <b>T</b>	Sep	Oct
566	1.4.4.1.1	Get contact details of vendors	1 day												1		
567	1.4.4.1.2	Contact the vendors regarding licenses	1 day														
568	1.4.4.1.3	Get a list of equipments, softwares	2 days												Ш		
569	1.4.4.1.4	Select the ones that we could be using	1 day														
570	1.4.4.1.5	Present that to the team	1 day														
571	1.4.4.2	Discuss the features we need to use	2 days												n		
572	1.4.4.2.1	Setup meeting with team	2 days														
573	1.4.4.2.2	List the required features	2 days														
574	1.4.4.2.3	Check which features require licenses	2 days														
575	1.4.4.2.4	Inform that to the vendors	1 day												1		
576	1.4.4.2.5	Get a quote	1 day														
577	1.4.4.3	Discuss cost for the license	5 days												П		
578	1.4.4.3.1	Setup meeting with vendors	2 days														
579	1.4.4.3.2	Discuss cost of licenses	2 days														
580	1.4.4.3.3	Discuss the time of activation for the licenses	2 days														
581	1.4.4.3.4	Discuss cost of maintainance and if it can be	2 days														
		included in the license															
	1.4.4.3.5		1 day														
583	1.4.4.4	Discuss about the incurring cost with university	3 days												П		
		experts															
	1.4.4.4.1	Present the feature list to university experts	2 days														
	1.4.4.4.2	9	2 days														
	1.4.4.4.3		2 days														
587	1.4.4.4.4	Ask if the cost is reasonable	2 days														
588	1.4.4.4.5	Record their responses and present it to the team	1 day												•		
589	1.4.4.5	Buy the licenses	2 days												M		
590	1.4.4.5.1	Contact vendor	1 day														
591	1.4.4.5.2	Send them the final requirement	1 day														
592	1.4.4.5.3	Send them the eqipments and softwares list	1 day														
				Pa	ge 22												

ID	WBS	Task Name	Duration		4th Qua				)uarter	NA	2nd Quar			3rd Qu		6	4th Quart
593	1.4.4.5.4	Ask the final quote	1 day	Sep	Oct	Nov	Dec	Jar	n Feb	Mar	Apr	May	Jun	Jul	Aug	Se <sub>l</sub>	p Oct
594	1.4.4.5.5	Send money and buy the licenses	1 day												1	ı	
595	1.4.5	Renewal of permits and licenses	13 days												I	<del></del>	
596	1.4.5.1	Review the current legal terms	4 days												1	П	
597	1.4.5.1.1	Set up a meeting for discussion.	2 days												I		
598	1.4.5.1.2	Go through the current legal permits document.	2 days												١		
599	1.4.5.1.3	Discuss case studies for the current legal document.	2 days														
600	1.4.5.1.4	Spot deficiencies in current legal permit.	1 day														
601	1.4.5.1.5	Document the deficiencies.	1 day														
602	1.4.5.2	Discuss and form new terms for renewal	1 day														
603	1.4.5.2.1	Organise a brainstorming session.	1 day														
604	1.4.5.2.2	Review the deficiencies document from the meeting.	1 day													•	
605	1.4.5.2.3	Brainstorm ideas to fix the deficiencies.	1 day														
606	1.4.5.2.4	Come up with terms to include those ideas in the current legal permit document.	1 day														
607	1.4.5.2.5	Include the new ideads in the new legal agreement.	1 day													•	
608	1.4.5.3	Make a final document of legal terms	3 days													П	
609	1.4.5.3.1	Review the new legal document.	1 day														
610	1.4.5.3.2	Present the document in front of the legal authority.	2 days														
611	1.4.5.3.3	Carry out discussions with legal authority.	2 days														
612	1.4.5.3.4	Come up with final updated legal terms.	1 day														
613	1.4.5.3.5	Create a final document of legal terms.	1 day														
614	1.4.5.4	Acquire the new legal permit	1 day														
615	1.4.5.4.1	Review the final document of legal terms.	1 day														
616	1.4.5.4.2	Send the document to legal authority.	1 day														
617	1.4.5.4.3	Get signature from legal authority.	1 day														
618	1.4.5.4.4	Review the signed document.	1 day														
				Pa	ge 23												

ID	WBS	Task Name	Duration		4th Qu				t Quart		1	2nd Quart		1	3rd Qua			4th Qu	
619	1.4.5.4.5	Publish the terms of agreement.	1 day	Sep	Oct	<u>: N</u>	lov Dec	z Ja	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	o Oct	<u>:</u>
	1.4.5.5	-	4 days														Н		
	1.4.5.5.1		1 day																
	1.4.5.5.2		2 days																
623	1.4.5.5.3		2 days																'
624	1.4.5.5.4	Get signature from legal authority.	1 day																'
625	1.4.5.5.5	Publish the terms of agreement.	1 day																'
626	1.5	Hiring Human Resources	68 days				-		_		1								'
627	1.5.1	Interviews	30 days				-		I										'
628	1.5.1.1	Interview questions	7 days				Н												'
629	1.5.1.1.1	Consider interview questions that are appropriate for the job title	1 day				•												
630	1.5.1.1.2	Create interview questions	1 day																'
631	1.5.1.1.3	Administer interview questions on interviewee	3 days				ш												
632	1.5.1.1.4	Analyze the results of how the interviewee answered the questions	2 days																
633	1.5.1.1.5	Revise interview questions to make for better interviews in the future	1 day				•												
634	1.5.1.2	Background check	6 days				Н												
635	1.5.1.2.1	Inform new hire a background check is needed to be hired	1 day				•												
636	1.5.1.2.2	Apply for background check on new hire	1 day				1												
637	1.5.1.2.3	Receive results of background check for new hire	2 days				1												
638	1.5.1.2.4	Analyze results of background check for new hire	1 day				•												
	1.5.1.2.5	Make decision on whether new hire is considered to be hired and notify if new hire does not pass the background check	2				1												
	1.5.1.3	-	6 days				-												
641	1.5.1.3.1	Make appointment with new hire	1 day					<u>,                                      </u>											
				Pa	age 24														

ID	WBS	Task Name	Duration	Sep	4th Quar Oct	rter Nov	Dec		uarter n Feb	Mar	2nd Quarter Apr M	ay	lun	3rd Qua Jul	rter Aug	Sep	4th Quart Oct
642	1.5.1.3.2	Administer drug test with new hire	2 days	Зер	Oct	INOV	_ Dec	Jai	i reb	IVIAI	Api ivi	ay	Juli	Jui	Aug	Зер	OCC
643	1.5.1.3.3	Submit drug test results to lab	1 day														
644	1.5.1.3.4	Receive drug test results	1 day														
645	1.5.1.3.5	Notify new hire drug test results if they fail the drug test	1 day														
646	1.5.1.4	Interview scheduling	11 days														
647	1.5.1.4.1	Put together a calendar for best interview times	1 day														
648	1.5.1.4.2	Assign interviewer to specific interview dates	2 days														
649	1.5.1.4.3	Assign interviewees to an interview time slot	2 days														
650	1.5.1.4.4	Plan ahead for future interview time slots	2 days														
651	1.5.1.4.5	Review interview schedule and refine interview dates and times	1 day														
652	1.5.1.5	Orientation/onboarding	1 day														
653	1.5.1.5.1	Schedule first day of orientation time and place	1 day														
654	1.5.1.5.2	Prepare powerpoint presentation and meet with general managers	1 day														
655	1.5.1.5.3	Provide a tour of the work environment	1 day														
656	1.5.1.5.4	Provide overview of all processes involved in the job	1 day														
657	1.5.1.5.5	Discuss work policies, dress code, and what is expected of the employees	1 day														
658	1.5.2	Assign roles	14 days														
659	1.5.2.1	Survey	2 days						1								
660	1.5.2.1.1	New hires are emailed an online survey	1 day						I								
661	1.5.2.1.2	New hires are to open and fully read the online survey	1 day						I								
662	1.5.2.1.3	New hires are to complete the online survey	1 day						I								
663	1.5.2.1.4	New hires are to submit the online survey via email	1 day						l								
				Pag	ge 25												

ID	WBS	Task Name	Duration			th Quar			Quarte			2nd Qu		Ι.		3rd Quar		2	4th Qua	
664	1.5.2.1.5	New hires are to wait for online survey results	1 day	Sep		Oct	Nov	Dec	 Jan	Feb	Mar	Apr	May	Ju	in	Jul	Aug	Sep	Oct	
665	1.5.2.2	Analyze survey	1 day																	'
666	1.5.2.2.1	Employees are to download accepted surveys	1 day						ı											
667	1.5.2.2.2	Employees are to review accepted surveys	1 day																	'
668	1.5.2.2.3	Employees are to analyze accepted surveys	1 day																	
669	1.5.2.2.4	Employees are to categorize accepted surveys	1 day																	
670	1.5.2.2.5	Employees are to conclude a final analysis of surveys	1 day																	
671	1.5.2.3	Prepare list of available roles	6 days																	'
672	1.5.2.3.1	Take a role of all current employees	1 day																	'
673	1.5.2.3.2	Review project scope to determine which positions are not filled	s 2 days																	
674	1.5.2.3.3	Put together a document of unfilled positions	2 days																	
675	1.5.2.3.4	Analyze the document of unfilled positions	2 days																	
676	1.5.2.3.5	Finalize the document of unfilled positions	1 day																	
677	1.5.2.4	Student deliverables	1 day							i										
678	1.5.2.4.1	Attend to work weekly	1 day							l .										
679	1.5.2.4.2	Observe weekly maintenance and enhancements	1 day							l										
680	1.5.2.4.3	Analyze weekly maintenance and enhancements	1 day							l										
681	1.5.2.4.4	Record weekly maintenance and enhancements	1 day							l										
682	1.5.2.4.5	Produce weekly write up	1 day							l .										
683	1.5.2.5	Interviews	4 days						I	п										
684	1.5.2.5.1	Determine interviewees	1 day						ı	l .										
685	1.5.2.5.2	Schedule interview time and place	2 days																	
686	1.5.2.5.3	Prepare for interview questions	2 days																	
				Pa	age 2	26												 		

ID	WBS	Task Name	Duration		4th Quarter Oct			uarter			Quarter	4.		3rd Qua			4th Quart Oct
687	1.5.2.5.4	Conduct the interview	2 days	Sep	Oct	Nov [	Dec Jai	n   	Feb Mar	-   A	pr N	Лау	Jun	Jul	Aug	Sep	Oct
688	1.5.2.5.5	Record results of the interview	1 day														
689	1.5.3	Work details	5 days					[	н								
690	1.5.3.1	Students	1 day					I									
691	1.5.3.1.1	Work 15-20 hours per week	1 day														
692	1.5.3.1.2	Attend all weekly meetings	1 day														
693	1.5.3.1.3	Analyze weekly meetings	1 day														
694	1.5.3.1.4	Create weekly write up	1 day					ı									
695	1.5.3.1.5	Present weekly write up to GM	1 day														
696	1.5.3.2	General manager	1 day														
697	1.5.3.2.1	Coordinate interviews	1 day						ı								
698	1.5.3.2.2	Coordinate schedules	1 day														
699	1.5.3.2.3	Coordinate meetings	1 day														
700	1.5.3.2.4	Overview operations	1 day														
701	1.5.3.2.5	View weekly report by students	1 day						ı								
702	1.5.3.3	Maintenance team	1 day														
703	1.5.3.3.1	Check every bus monitor	1 day						I								
704	1.5.3.3.2	Check every bus weigh scale	1 day						I								
705	1.5.3.3.3	Check command center is working properly	1 day														
706	1.5.3.3.4	Check gps systems are accurate and working	1 day						I								
707	1.5.3.3.5	Submit document of any issues	1 day														
708	1.5.3.4	Enhancement team	1 day														
709	1.5.3.4.1	Check for documents of any issues reported by maintenance team	1 day														
710	1.5.3.4.2	Weekly meeting to discuss issues noted from maintenance team	1 day						•								
711	1.5.3.4.3	Create strategy on how to approach issues noted from maintenance team	1 day						1								
712	1.5.3.4.4	Execute issues noted from maintenance team	1 day						1								

ID	WBS	Task Name	Duration			Quarte			1st Q				2nd Qu		1.		Quarte			4th Quart
713	1.5.3.4.5	Report and document any and all solutions to issues noted by maintenance team	1 day	Sep		Oct	Nov	Dec	Jar	<u>1</u>	Feb	Mar	Apr	May	Jun	J	Jul	Aug	Sep	Oct
714	1.5.3.5	Development team	1 day																	
715	1.5.3.5.1	Agree to program requirements	1 day																	
716	1.5.3.5.2		1 day																	
717	1.5.3.5.3	Test the software by the requirements	1 day																	
718	1.5.3.5.4	Delivery time is to be in a timely manner	1 day																	
719	1.5.3.5.5	Guarentee that software is of their highest quality	1 day																	
720	1.5.4	Paperwork details	9 days								Н									
721	1.5.4.1	Contact Information	4 days								П									
722	1.5.4.1.1	Create a folder to hold contact information	4 days																	
723	1.5.4.1.2	Record employee address	1 day																	
724	1.5.4.1.3	Record employee phone number	1 day																	
725	1.5.4.1.4	Record employee email address	1 day																	
726	1.5.4.1.5	Document and organize contact information folder	1 day								1									
727	1.5.4.2	Emergency contact	1 day																	
728	1.5.4.2.1	Provides emergency contact name	1 day																	
729	1.5.4.2.2	Provides emergency contact phone number	1 day																	
730	1.5.4.2.3	Provides emergency contact relation	1 day																	
731	1.5.4.2.4	Provides second emergency contact	1 day																	
732	1.5.4.2.5	Provides emergency contacts address	1 day																	
733	1.5.4.3	Agreement contract	5 days								П									
734	1.5.4.3.1	Employee will read agreement contract	1 day																	
735	1.5.4.3.2	Employee signs and agrees to agreement contract	2 days								II									
736	1.5.4.3.3	Agreement contract is documented and stored in a safe location	2 days								Ш									
737	1.5.4.3.4	Agreement contract is made into a digital copy	2 days								Ш									
				Pa	ige 2	28														

ID	WBS	Task Name	Duration	Sep	4th Quar	arter Nov	Dec	1st Qua		Mar	2nd Quart	arter May	Jun	3rd Qua	ıarter Aug	Sep	4th Quart Oct	t
738	1.5.4.3.5	Digital agreement contract is saved safely on cloud in case computer is destroyed	1 day	Зер	Oct	ΙΝΟν	Dec	_ Jan	_   FED	IVIai	<u> </u>	<u>IVIay</u>	Jun	_  Jui	_  Aug_	JEP	<u>  Uct  </u>	1
739	1.5.4.4	·	3 days						ľ	.1								'
740	1.5.4.4.1	•	1 day							1								'
741	1.5.4.4.2	-	2 days						W.	4								1
742	1.5.4.4.3	Contract agreement is documented and stored in a safe location	1 day															
743	1.5.4.4.4	Contract agreement is made into a digital copy	1 day															
744	1.5.4.4.5	Contract agreement is saved safely on cloud in case computer is destroyed	1 day							1								
745	1.5.4.5	Medical Information	1 day						II,	4								1
746	1.5.4.5.1	All employees provide any health issues	1 day							4								'
747	1.5.4.5.2	All employees provide health history	1 day							4								'
748	1.5.4.5.3	All employees provide doctors name	1 day						ľ	4								'
749	1.5.4.5.4	All employees provide doctors phone number	1 day						•	I								
750	1.5.4.5.5	All employees provide any health concerns	1 day							4								
751	1.5.5	Hiring Qualified Employees	5 days						ľ	П								'
	1.5.5.1	• •	1 day						ľ	4								'
753	1.5.5.1.1	Enrolled in College of Computer Informatics	1 day						•	4								'
	1.5.5.1.2	·	1 day						7	4								
	1.5.5.1.3		1 day						•	4								'
	1.5.5.1.4	1 1	1 day						•	4								
757	1.5.5.1.5		1 day						7	4								
758	1.5.5.2	-	1 day															
759	1.5.5.2.1	Apply and hired by College of Computer Informatics department	1 day							•								
760	1.5.5.2.2	5 years of managing experience	1 day							1								
761	1.5.5.2.3		1 day							I								
762	1.5.5.2.4	Must have computer science or similar techonology related background	1 day															
				Pe	age 29													1

ID	WBS	Task Name	Duration		4th	Quarțe	r ,		1st Quar	er	1	2nd Qua	rter		3rd Quarte	4th Quart		
				Sep	C	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
763	1.5.5.2.5	Must get dean of the departments approval	1 day								l							
764	1.5.5.3	Maintenance team	1 day							1								
765	1.5.5.3.1	<b>Enrolled in College of Computer Informatics</b>	1 day							I								
766	1.5.5.3.2	GPA greater or equal to 3.0	1 day							1	I							
767	1.5.5.3.3	Full time student	1 day							1								
768	1.5.5.3.4	Must submit completed application	1 day							1	I							
769	1.5.5.3.5	Must have teacher recommendation	1 day							1								
770	1.5.5.4	Enhancement team	1 day															
771	1.5.5.4.1	<b>Enrolled in College of Computer Informatics</b>	1 day															
772	1.5.5.4.2	GPA greater or equal to 3.0	1 day															
773	1.5.5.4.3	Full time student	1 day															
774	1.5.5.4.4	Must submit completed application	1 day								ı							
775	1.5.5.4.5	Must have teacher recommendation	1 day															
776	1.5.5.5	Development team	1 day															
777	1.5.5.5.1	Third party contract	1 day															
778	1.5.5.5.2	Referral reputation	1 day															
779	1.5.5.5.3	Contract is inside the budget	1 day															
780	1.5.5.5.4	Guarenteed quick delivery time	1 day															
781	1.5.5.5.5	Guarenteed quality software	1 day															
			<u> </u>															