Development of a touch typing trainer with an emphasis on finger-key identification

Oscar Vian L. Valles

	Project Start Date: 2/21/2022 (Monday) Display Week: 1	Week 1 Week 2 Week 3 Week 4 Week 5 Week 6 Week 7 Week 8 Week 9 Week 10 Week 11 Week 12 Week 13 Week 14 Week 15 Week 16 Week 17
	Project Start Date. 272172022 (Worlday) Display Week.	12 22 32 42 55 82 72 88 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 17 18 19 20 21 22 22 44 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 111 2 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 23 24 25 26 72 89 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 24 25 24 25 26 77 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 23 24 25 26 77 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 21 22 24 25 24 25 26 77 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 71 18 19 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20 18 20
WBS Task	Start End Days % Work Done Days	M T W Th F Su Su M T W
1 Experimental Setup	Mon 2/21/22 Mon 2/21/22 1 1	
1.1 Camera Setup and Placement	Mon 2/21/22 Mon 2/21/22 1 0% 1	
 Keyboard Setup and Placement 	Mon 2/21/22 Mon 2/21/22 1 0% 1	
1.3 Environmental Setup and Placement	Mon 2/21/22 Mon 2/21/22 1 0% 1	
2 Keyboard Detection and Mapping	Tue 2/22/22 Fri 3/18/22 25 19	
2.1 Convert to Greyscale and Edge Detection usin	ng Sobel Filter Tue 2/22/22 Sat 3/05/22 12 0% 9	
2.2 Find Contours	Mon 3/07/22 Fri 3/11/22 5 0% 5	
2.3 Overlay Virtual Keyboard Map	Mon 3/14/22 Tue 3/15/22 2 0% 2	
2.4 Methodology Writing	Wed 3/16/22 Fri 3/18/22 3 0% 3	
3 Finger Detection and Tracking, Integration	Mon 3/21/22 Wed 4/13/22 24 18	
3.1 Finger Detection and Tracking	Mon 3/21/22 Fri 3/25/22 5 0% 5	
3.2 Integration (Find ROI)	Mon 3/28/22 Fri 4/01/22 5 0% 5	
 Integration (Find and Return Fingertip on ROI) 	Mon 4/04/22 Fri 4/08/22 5 0% 5	
3.4 Methodology Writing	Mon 4/11/22 Wed 4/13/22 3 0% 3	
4 Touch Typing Trainer	Thu 4/14/22 Thu 5/19/22 36 26	
4.1 Front-end Development	Thu 4/14/22 Sat 4/23/22 10 0% 7	
4.2 Back-end Development	Sun 4/24/22 Tue 5/03/22 10 0% 7	
4.3 Finger-key Identification and Mapping Accuracy	y Wed 5/04/22 Fri 5/13/22 10 0% 8	
4.4 Methodology; Results and Discussion Writing	Sat 5/14/22 Thu 5/19/22 6 0% 4	
5 Final Paper Writing and Presentation	Fri 5/20/22 Wed 6/15/22 27 19	
5.1 Conclusion	Fri 5/20/22 Sun 5/22/22 3 0% 1	
5.2 Recommendation and Future Work	Mon 5/23/22 Wed 5/25/22 3 0% 3	
5.3 Proofreading	Thu 5/26/22 Fri 6/03/22 9 0% 7	
5.4 Journal Article Writing	Sat 6/04/22 Fri 6/10/22 7 0% 5	
5.5 Presentation Preparation	Sat 6/11/22 Wed 6/15/22 5 0% 3	