Unit 1

| Lesson Plan | | | |
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| Name: | [Joe Willbourne](mailto:joe.willbourne@wayve.ai) | | |
| Job Title: | Autonomous Vehicle Safety Operator (AVSO) | | |

| Date: | 08/04/24 | | |
| --- | --- | --- | --- |
| Aim:  *(Overall goal?)* | Complete all Learning Outcomes required for Unit 1:   1. LO1 Drive an electric vehicle safely. 2. LO2 Prepare and drive an electric vehicle safely to a high standard. 3. LO3 Prepare and drive an autonomous vehicle in data collection. | | |
| Objective:  *(Steps taken to reach that goal?)* | 1. Undergo a high standard driving test to show your professionalism and ability to drive to the standards required here at Wayve 2. Be shown how to conduct a BUI of a vehicle and ensure its roadworthiness before heading out onto the road. 3. You will use your understanding of the systems to set up, and safely conduct a DC run to our closed road test site. | | |
| Session:  *(What are you planning to do? What resources did you use?)* | Today you will be working towards successful completion of LO3.  You will learn how to correctly set up the vehicle in Data Collection mode and plot a route to the test site.  You will follow the sat nav correctly and ensure a high standard of driving is maintained throughout your time on the road | | |
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| Trainer  Feedback:  *(What Went Well & Areas Of Improvement)* | Being a motorcyclist, Joe showed really good observations today during his high standard driving test. We talked about the need for us to keep left at all times where the road dictates and Joe started to incorporate this into his driving. Joe showed great blindspot checks when switching lanes and also when turning left and right.  Joe did touch the UI when stationary at one point to check the route, we had a discussion as to why we do not do this, and if in the future he does need to touch the UI going forward, to just pull over and carry out whatever action you need.  Overall, a very successful drive today, continues to maintain these high standards. Well done Joe!   * Focus on keeping in the left lane at all times where the road allows. | | |
| Learner Self-Reflection: | A great overall day. All training was explained clearly. I learnt a lot today and I'm looking forward to tomorrow. | | |

Unit 2

| Lesson Plan | | | |
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| Name: | [Joe Willbourne](mailto:joe.willbourne@wayve.ai) | | |
| Job Title: | Autonomous Vehicle Safety Operator (AVSO) | | |

| Date: | 08/04/24 | | |
| --- | --- | --- | --- |
| Aim:  *(Overall goal?)* | Complete all Learning Outcomes required for Unit 2: 1. LO1 Prepare an autonomous vehicle for safe operation in a Closed Road Testing 2. LO2 Operate an autonomous vehicle in a Closed Road Testing environment | | |
| Objective:  *(Steps taken to reach that goal?)* | - Attend a Closed Road Testing (CRT) site and conduct Autonomous driving - Work through the required steps needed to setup a Autonomous Feature Test (AFT) test on the UI - Learn and put into practise the methods of intervening with the system - Safely carry out an AFT | | |
| Session:  *(What are you planning to do? What resources did you use?)* | Today you will attend the test site and we will show you how to set up an AFT through the steps required on the UI.  We will show you the areas we use on the site to ensure your understanding of the different areas.  We will have discussions around Interventions with the systems and carry out a couple of tes circuits s to make sure you are comfortable operating the system, that you feel in control to intervene with the system if necessary and we will start to build up your confidence | | |
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| Trainer  Feedback:  *(What Went Well & Areas Of Improvement)* | Today Joe showed a good ability to quickly pick up the interaction with the UI and gamepad checks. When initially starting AV testing, Joe encountered many ‘accidental’ engagements, over time and practice, these started to separate. We discussed the needs for good observations when in AV and the importance of them to be carried out correctly.  Joe initially was seeing ‘IF’ the model would return to our side of the road and after a discussion even though not as far, he continued to show this. We had a good discussion about why we must not do this and the importance of intervening the moment the model starts to do something it shouldn’t and to correct it. After a couple of check rides, this started to be shown with consistency.Joe must continue to show this when we conduct testing and not see what the model does.  Following a discussion around conducting testing in a serious manner, and a test ride to show me Joe's ability to show seriousness during testing, my concerns on this were settled.  Overall, Joe showed a very good ability to quickly pick up the systems, great observations and, at the end, a solid foundation for him to build his AVSO skills upon. Great work Joe!   * Remember not to touch the UI during driving * Continue to show seriousness during testing * Continue Intervening when the model is going to something it shouldn’t | | |
| Learner Self-Reflection: | I Learned from all the pointers the trainer told me and I am very happy with the progression I have made. Excellent training and experience gained. | | |

[[1]](#footnote-0)

Unit 3.1

| Lesson Plan | | | |
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| Name: | [Joe Willbourne](mailto:joe.willbourne@wayve.ai) | | |
| Job Title: | Autonomous Vehicle Safety Operator (AVSO) | | |

| Date: | 09/04/24 | | |
| --- | --- | --- | --- |
| Aim:  *(Overall goal?)* | Complete all Learning Outcomes required for Unit 3: 1. LO1 Prepare an autonomous vehicle for safe operation in a Open Road Testing 2. LO2 Operate an autonomous vehicle in a Open Road Testing environment | | |
| Objective:  *(Steps taken to reach that goal?)* | - Head to Sommers Town to learn about on road testing. - You will be shown how to correctly setup an AFT for an Open Road Test, using the UI. - You will have the opportunity to demonstrate your ability to safely conduct testing. | | |
| Session:  *(What are you planning to do? What resources did you use?)* | During this session you will head out to Sommers Town and following successful competence at these test sites, you will conduct a Cali V2 test route. These environments will help you to further develop your skills as an AVSO. You will be shown how to set up an AFT, how to manually plot a route/load one from the UI pre planned maps and carry out a AFT of this route. | | |
|
| Trainer  Feedback:  *(What Went Well & Areas Of Improvement)* | Today Joe continues to further build upon his AV skills moving to Open-road testing. At the start of the day we went to Sommers town and Joe showed good competence, we had a discussion again about the need to intervene the moment something doesn’t feel right and Joe mentioned he wanted to ‘see if the model corrected itself’.  We talked over this not being a good approach and not what we want to see from AVSOs and instead they intervene the moment the emodel is unsafe or not following the highway code. Joes ability to do this improved as we carried on through the morning.  We headed to do a ‘free-plot’ short route on the Cali road before concluding the afternoon and again me and Joe talked about him must intervening as soon as he feels its not right, as these test continue Joe started to really show a good understanding of the correct interventions.  In the afternoon we carried out Cali V2 runs. We discussed Joe needing to take hold of the steering wheel fully following an intervention and not to control using just his fingertips. In the afternoon, we had a late intervention on a zebra crossing to which Joe said ‘he wasn’t sure what the pedestrian was doing’. We spoke over the importance of intervening for these uncertain situations as this is better than letting the model decide.  Joe showed great observations throughout the day with some learning points discussed.   * Be sure to fully hold the steering wheel in the right place when intervening. * You MUST intervene the moment something doesnt feel right, or if you are uncertain of anything and you mustn’t allow the model to make these decisions for you. Intervene, drive through, re-engage.   Safety is the highest priority.   * Joe would benefit from starting to look over the taxonomy definitions and build his knowledge further on the correct words to use. | | |
| Learner Self-Reflection: | All feedback has been taken on board. Overall great day and will now go on my first instinct and will revise taxonomy for tomorrow. | | |

Unit 3.2

| Lesson Plan | | | |
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| Name: | [Joe Willbourne](mailto:joe.willbourne@wayve.ai) | | |
| Job Title: | Autonomous Vehicle Safety Operator (AVSO) | | |

| Date: |  | | |
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| Aim:  *(Overall goal?)* | 1. Conduct testing on Alpha Routes and Crouch End 2. Improve to the Driving standards required, ready for Unit 3 Assessment | | |
| Objective:  *(Steps taken to reach that goal?)* | - Have a discussion about the Driving standards required here at Wayve - Successfully demonstrate the required driving standards during AV testing.  - Expand routes to Alpha 1, 2 and Crouch End | | |
| Session:  *(What are you planning to do? What resources did you use?)* | During this session, Learners will head out and start conducting testing on Alpha, 1, 2 and Crouch End and Finsbury Park testing routes.  This session will continue with the development of your AVSO skills, changing to a more complex environment and maintaining Autonomous Driving for longer distances. | | |
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| Trainer  Feedback:  *(What Went Well & Areas Of Improvement)* | This morning we started by completing an Alpha 1 and Alpha 2 route.  During the routes he displayed good awareness around the vehicle and good observations.  We discussed the importance of all around and blindspot checks before engaging in Autonomous Vehicle (AV) mode, which Joe started implementing throughout the rest of the run.  We also discussed that his hands position needs to come up higher when intervening and have a proper grip of the steering wheel.  We moved onto a Crouch End and Joe continued to show very good observations during the drive and the correct time to intervene. He took on board the feedback well, and was engaging when safe to do so and carrying out full observations.  Towards the end of the route, we had one late intervention when we turned right from Holloway Road into Camden Road, the model took a late turn towards a bollard and Joe intervened at the very last second. We spoke about the importance of looking ahead after the car has turned to see the hazards ahead and intervene in good time, rather than looking around the car.  This afternoon Joe completed a Finsbury Park route and he conducted it well with timely interventions and I had no safety concerns during this run. He was also trying to bring in the Taxonomy which he had improved on throughout the day.  Learning points to consider:   * Be sure to fully hold the steering wheel in the right place when intervening * Joe needs to revise the taxonomy definitions and build his knowledge further on the correct words to use.   Well done Joe! | | |
| Learner Self-Reflection: | I need to focus on these issues and do more training on taxonomy within the next few days. Great day all round | | |

Unit 3.3

| Lesson Plan | | | |
| --- | --- | --- | --- |
| Name: | [Joe Willbourne](mailto:joe.willbourne@wayve.ai) | | |
| Job Title: | Autonomous Vehicle Safety Operator (AVSO) | | |

| Date: |  | | |
| --- | --- | --- | --- |
| Aim:  *(Overall goal?)* | 1. Conduct testing on Finsbury Park and Upper Holloway routes 2. Increase testing speeds up to 30 and 40mph 3. Improve to the Driving standards required, ready for Unit 3 Assessment | | |
| Objective:  *(Steps taken to reach that goal?)* | - Successfully demonstrate the required driving standards during AV testing.  - Expand routes to Finsbury Park and Upper Holloway - Explore routes which use 30 and 40mph speed limits | | |
| Session:  *(What are you planning to do? What resources did you use?)* | During this session, Learners will head out and start conducting testing on Finsbury Park and Upper Holloway testing routes.  This session will continue with the development of your AVSO skills, changing to a more complex environment and maintaining Autonomous Driving for longer distances. | | |
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| Trainer  Feedback:  *(What Went Well & Areas Of Improvement)* |  | | |
| Learner Self-Reflection: |  | | |

Unit 3.4

| Lesson Plan | | | |
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| Name: | [Joe Willbourne](mailto:joe.willbourne@wayve.ai) | | |
| Job Title: | Autonomous Vehicle Safety Operator (AVSO) | | |
| Date: |  | | |
| Aim:  *(Overall goal?)* | 1. Conduct testing on a Euston Route  2. Further show your ability to operate the Autonomous vehicle systems by conducting ‘Solo testing’ on our ALR routes. | | |
| Objective:  *(Steps taken to reach that goal?)* | - Expand routes to Euston Road  - Showcase your ability to successfully carry out testing of an autonomous vehicle when driving ‘solo’ | | |
| Session:  *(What are you planning to do? What resources did you use?)* | You will continue to develop your knowledge of more routes by conducting testing on the level 4 Euston route.  All being well that the learner has shown a successful ability to control the AV system to the required standard, they will now be able to head out and conduct ‘Solo On-road testing’. This will be a mixture of routes covered during their training, Alpha routes up to ALR’s. | | |
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| Trainer  Feedback:  *(What Went Well & Areas Of Improvement)* |  | | |
| Learner Self-Reflection: |  | | |

| Lesson Plan | | | |
| --- | --- | --- | --- |
| Name: | [Joe Willbourne](mailto:joe.willbourne@wayve.ai) | | |
| Job Title: | Autonomous Vehicle Safety Operator (AVSO) | | |

| Date: | 18/03/24 | | |
| --- | --- | --- | --- |
| Aim:  *(Overall goal?)* | - Conduct testing on Cali V2 routes and build up to Alpha routes - Improve to the Driving standards required, ready for Unit 3 Assessment | | |
| Objective:  *(Steps taken to reach that goal?)* | - Have a discussion about the Driving standards required here at Wayve - Successfully demonstrate the required driving standards during AV testing.  - Expand routes to Cali V2, and Alpha Lane routes | | |
| Session:  *(What are you planning to do? What resources did you use?)* | During this session, Learners will head out and start conducting testing on Alpha, 1, 2 and Crouch end testing routes.  This session will continue with the development of your AVSO skills, changing to a more complex environment and maintaining Autonomous Driving for longer distances. | | |
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| Trainer  Feedback:  *(What Went Well & Areas Of Improvement)* |  | | |
| Learner Self-Reflection: |  | | |

1. New Starter Training 02/08/23 [↑](#footnote-ref-0)