

FIGURE 1 This is the sample figure caption.



FIGURE 2 This is the sample figure caption.

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Example for bibliography citations cite³, cites^{4,5}

Quisque ullamcorper placerat ipsum. Cras nibh.^{6,7} Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

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Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.

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2.1 | Example for second level head

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Donec odio elit, dictum in, hendrerit sit amet, egestas sed, leo. Praesent feugiat sapien aliquet odio. Integer vitae justo. Aliquam vestibulum fringilla lorem. Sed neque lectus, consectetur at, consectetur sed, eleifend ac, lectus. Nulla facilisi. Pellentesque eget lectus. Proin eu metus. Sed porttitor. In hac habitasse platea dictumst. Suspendisse eu lectus. Ut mi mi, lacinia sit amet, placerat et, mollis vitae, dui. Sed ante tellus, tristique ut, iaculis eu, malesuada ac, dui. Mauris nibh leo, facilisis non, adipiscing quis, ultrices a, dui.

Morbi luctus, wisi viverra faucibus pretium, nibh est placerat odio, nec commodo wisi enim eget quam. Quisque libero justo, consectetur a, feugiat vitae, porttitor eu, libero. Suspendisse sed mauris vitae elit sollicitudin malesuada.

Maecenas ultricies eros sit amet ante. Ut venenatis velit. Maecenas sed mi eget dui varius euismod. Phasellus aliquet volutpat odio. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Pellentesque sit amet pede ac sem eleifend consectetur. Nullam elementum, urna vel imperdiet sodales, elit ipsum pharetra ligula, ac pretium ante justo a nulla. Curabitur tristique arcu eu metus. Vestibulum lectus. Proin mauris. Proin eu nunc eu urna hendrerit faucibus. Aliquam auctor, pede consequat laoreet varius, eros tellus scelerisque quam, pellentesque hendrerit ipsum dolor sed augue. Nulla nec lacus.

This is an example^{8,9,10} for quote text. This is an example for quote text. This is an example for quote text. This is an example for quote text.¹¹ This is an example for quote text. This is an example for quote text. This is an example for quote text. This is an example for quote text.¹² This is an example for quote text. This is an example for quote text. This is an example for quote text.

3 | SAMPLE FOR NEXT FIRST LEVEL HEAD

3.1 | Example for another second level head

Suspendisse vitae elit. Aliquam arcu neque, ornare in, ullamcorper quis, commodo eu, libero. Fusce sagittis erat at erat tristique mollis. Maecenas sapien libero, molestie et, lobortis in, sodales eget, dui. Morbi ultrices rutrum lorem. Nam elementum ullamcorper leo. Morbi dui. Aliquam sagittis. Nunc placerat. Pellentesque tristique sodales est. Maecenas imperdiet lacinia velit. Cras non urna. Morbi eros pede, suscipit ac, varius vel, egestas non, eros. Praesent malesuada, diam id pretium elementum, eros sem dictum tortor, vel consectetur odio sem sed wisi.

Sed feugiat. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Ut pellentesque augue sed urna. Vestibulum diam eros, fringilla et, consectetur eu, nonummy id, sapien. Nullam at lectus. In sagittis ultrices mauris. Curabitur malesuada erat sit amet massa. Fusce blandit. Aliquam erat volutpat. Aliquam euismod. Aenean vel lectus. Nunc imperdiet justo nec dolor.

3.2 | Second level head text

Etiam euismod. Fusce facilisis lacinia dui. Suspendisse potenti. In mi erat, cursus id, nonummy sed, ullamcorper eget, sapien. Praesent pretium, magna in eleifend egestas, pede pede pretium lorem, quis consectetur tortor sapien facilisis magna. Mauris quis magna varius nulla scelerisque imperdiet. Aliquam non quam. Aliquam porttitor quam a lacus. Praesent vel arcu ut tortor cursus volutpat. In vitae pede quis diam bibendum placerat. Fusce elementum convallis neque. Sed dolor orci, scelerisque ac, dapibus nec, ultricies ut, mi. Duis nec dui quis leo sagittis commodo.

3.2.1 | Third level head text

Aliquam lectus. Vivamus leo. Quisque ornare tellus ullamcorper nulla. Mauris porttitor pharetra tortor. Sed fringilla justo sed mauris. Mauris tellus. Sed non leo. Nullam elementum, magna in cursus sodales, augue est scelerisque sapien, venenatis congue nulla arcu et pede. Ut suscipit enim vel sapien. Donec congue. Maecenas urna mi, suscipit in, placerat ut, vestibulum ut, massa. Fusce ultrices nulla et nisl.

Etiam ac leo a risus tristique nonummy. Donec dignissim tincidunt nulla. Vestibulum rhoncus molestie odio. Sed lobortis, justo et pretium lobortis, mauris turpis condimentum augue, nec ultricies nibh arcu pretium enim. Nunc purus neque, placerat id, imperdiet sed, pellentesque nec, nisl. Vestibulum imperdiet neque non sem accumsan laoreet. In hac habitasse platea dictumst. Etiam condimentum facilisis libero. Suspendisse in elit quis nisl aliquam dapibus. Pellentesque auctor sapien. Sed egestas sapien

TABLE 1 This is sample table caption.

col1 head	Spanned heading1		Spanned heading2	
	col2 head	col3 head	col4 head	col5 head
col1 text	col2 text	col3 text	12.34	col5 text1
col1 text	col2 text	col3 text	1.62	col5 text2
col1 text	col2 text	col3 text	51.809	col5 text

Source: Example for table source text.

1Example for a first table footnote.

2Example for a second table footnote.

TABLE 2 This is sample table caption.

col1 head	col2 head	col3 head	col4 head	col5 head
col1 text	col2 text	col3 text	col4 text	col5 text†
col1 text	col2 text	col3 text	col4 text	col5 text
col1 text	col2 text	col3 text	col4 text	col5 text‡

Source: Example for table source text.

†Example for a first table footnote.

‡Example for a second table footnote.

Curabitur tellus magna, porttitor a, commodo a, commodo in, tortor. Donec interdum. Praesent scelerisque. Maecenas posuere sodales odio. Vivamus metus lacus, varius quis, imperdiet quis, rhoncus a, turpis. Etiam ligula arcu, elementum a, venenatis quis, sollicitudin sed, metus. Donec nunc pede, tincidunt in, venenatis vitae, faucibus vel, nibh. Pellentesque wisi. Nullam malesuada. Morbi ut tellus ut pede tincidunt porta. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam congue neque id dolor.

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Nulla in ipsum. Praesent eros nulla, congue vitae, euismod ut, commodo a, wisi. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Aenean nonummy magna non leo. Sed felis erat, ullamcorper in, dictum non, ultricies ut, lectus. Proin vel arcu a odio lobortis euismod. Vestibulum ante ipsum primis

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Below is the example^{2,6,7} for bulleted list. Below is the example for bulleted list. Below is the example for bulleted list. Below is the example for bulleted list. Below is the example for bulleted list. Below is the example for bulleted list¹:

- bulleted list entry sample bulleted list entry.¹³ sample list entry text.
- bulleted list entry sample bulleted list entry. bulleted list entry sample bulleted list entry. bulleted list entry sample bulleted list entry.
- bulleted list entry sample bulleted list entry.¹⁴ bulleted list entry sample bulleted list entry.¹⁵ sample list entry text. bulleted list entry sample bulleted list entry.
- sample list entry text. sample list entry text.

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Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

Below is the sample for description list. Below is the example for description list. Below is the example for description list. Below is the example for description list. Below is the example for description list. Below is the example for description list:

Description sample:

first entry description text. description text.^{16,17,18} description text. description text. description text. description text. description text.

second long entry description text. description text. description text. description text. description text. description text. description text.

third entry description text. description text. description text. description text. description text.

fourth entry description text. description text.

Numbered list items sample:

1. First level numbered list entry. sample numbered list entry.
2. First numbered list entry. sample numbered list entry. Numbered list entry.¹⁹ sample numbered list entry. Numbered list entry. sample numbered list entry.
 - a. Second level alphabetical list entry. Second level alphabetical list entry. Second level alphabetical list entry.²⁰ Second level alphabetical list entry.
 - b. Second level alphabetical list entry. Second level alphabetical list entry.^{21,4,4}
 - ii. Third level lowercase roman numeral list entry. Third level lowercase roman numeral list entry. Third level lowercase roman numeral list entry.
 - iiii. Third level lowercase roman numeral list entry. Third level lowercase roman numeral list entry.⁵
 - c. Second level alphabetical list entry. Second level alphabetical list entry.³

¹This is an example for footnote.

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Donec odio elit, dictum in, hendrerit sit amet, egestas sed, leo. Praesent feugiat sapien aliquet odio. Integer vitae justo. Aliquam vestibulum fringilla lorem. Sed neque lectus, consectetur at, consectetur sed, eleifend ac, lectus. Nulla facilisi. Pellentesque eget lectus. Proin eu metus. Sed porttitor. In hac habitasse platea dictumst. Suspendisse eu lectus. Ut mi mi, lacinia sit amet, placerat et, mollis vitae, dui. Sed ante tellus, tristique ut, iaculis eu, malesuada ac, dui. Mauris nibh leo, facilisis non, adipiscing quis, ultrices a, dui.

Proof. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. □

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Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Proof of Theorem 1. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. □

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Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Donec odio elit, dictum in, hendrerit sit amet, egestas sed, leo. Praesent feugiat sapien aliquet odio. Integer vitae justo. Aliquam vestibulum fringilla lorem. Sed neque lectus, consectetur at, consectetur sed, eleifend ac, lectus. Nulla facilisi. Pellentesque eget lectus. Proin eu metus. Sed porttitor. In hac habitasse platea dictumst. Suspendisse eu lectus. Ut Curabitur tellus magna, porttitor a, commodo a, commodo in, tortor. Donec interdum. Praesent scelerisque. Mae- cenas posuere sodales odio. Vivamus metus lacus, varius quis, imperdiet quis, rhoncus a, turpis. Etiam ligula arcu, elementum a, venenatis quis, sollicitudin sed, metus. Donec nunc pede, tincidunt in, venenatis vitae, faucibus vel,

nibh. Pellentesque wisi.¹⁰ Nullam malesuada. Morbi ut tellus ut pede tincidunt porta. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam congue neque id dolor.

Donec et nisl at wisi luctus bibendum. Nam interdum tellus ac libero. Sed sem justo, laoreet vitae, fringilla at, adipiscing ut, nibh. Maecenas non sem quis tortor eleifend fermentum. Etiam id tortor ac mauris porta vulputate. Integer porta neque vitae massa.^{1,22} Maecenas tempus libero a libero posuere dictum. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Aenean quis mauris sed elit commodo placerat. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Vivamus rhoncus tincidunt libero. Etiam elementum pretium justo. Vivamus est. Morbi a tellus eget pede tristique commodo.²² Nulla nisl. Vestibulum sed nisl eu sapien cursus rutrum.

TABLE 3 Sideways table caption. For decimal alignment refer column 4 to 9 in tabular* preamble.

	col2 head	col3 head	10	20	30	10	20	30
	col2 text	col3 text	0.7568	1.0530	1.2642	0.9919	1.3541	1.6108
		col2 text	12.5701	19.6603	25.6809	18.0689	28.4865	37.3011
3	col2 text	col3 text	0.7426	1.0393	1.2507	0.9095	1.2524	1.4958
		col3 text	12.8008	19.9620	26.0324	16.6347	26.0843	34.0765
	col2 text	col3 text	0.7285	1.0257	1.2374	0.8195	1.1407	1.3691 *
		col3 text	13.0360	20.2690	26.3895	15.0812	23.4932	30.6060 †

*First sideways table footnote. Sideways table footnote. Sideways table footnote. Sideways table footnote.

†Second sideways table footnote. Sideways table footnote. Sideways table footnote. Sideways table footnote.



FIGURE 3 Sideways figure caption. Sideways figure caption. Sideways figure caption. Sideways figure caption. Sideways figure caption.

Algorithm 1 Pseudocode for our algorithm

```

for e doach frame
  for w doater particles  $f_i$ 
    compute fluid flow1
    compute fluid–solid interaction22
    apply adhesion and surface tension23
  end for
  for s doolid particles  $s_i$ 
    for n doeighboring water particles  $f_j$ 
      compute virtual water film
    (see Section 3)
    end for
  end for
  for s doolid particles  $s_i$ 
    for n doeighboring water particles  $f_j$ 
      compute growth direction vector
    (see Section 2)
    end for
  end for
  for s doolid particles  $s_i$ 
    for n doeighboring water particles  $f_j$ 
      compute  $F_\theta$  (see Section 1)
      compute  $CE(s_i, f_j)$ 
    (see Section 3)
    if  $then CE(b_i, f_j) > \text{glaze threshold}$ 
       $j$ th water particle's phase  $\leftarrow$  ICE
    end if
    if  $then CE(c_i, f_j) > \text{icicle threshold}$ 
       $j$ th water particle's phase  $\leftarrow$  ICE
    end if
  end for
end for
end for

```

Pellentesque wisi. Nullam malesuada. Morbi ut tellus ut pede tincidunt porta. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam congue neque id dolor.

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$$\|\tilde{X}(k)\|^2 = \frac{\left\| \sum_{i=1}^p \tilde{Y}_i(k) + \sum_{j=1}^q \tilde{Z}_j(k) \right\|^2}{(p+q)^2} \leq \frac{\sum_{i=1}^p \|\tilde{Y}_i(k)\|^2 + \sum_{j=1}^q \|\tilde{Z}_j(k)\|^2}{p+q}. \quad (2)$$

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$$\|\tilde{X}(k)\|^2 = \frac{\left\| \sum_{i=1}^p \tilde{Y}_i(k) + \sum_{j=1}^q \tilde{Z}_j(k) \right\|^2}{(p+q)^2} \leq \frac{\sum_{i=1}^p \|\tilde{Y}_i(k)\|^2 + \sum_{j=1}^q \|\tilde{Z}_j(k)\|^2}{p+q}. \quad (3)$$

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5 | CONCLUSIONS

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ACKNOWLEDGMENTS

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Author contributions

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Financial disclosure

None reported.

Conflict of interest

The authors declare no potential conflict of interests.

SUPPORTING INFORMATION

The following supporting information is available as part of the online article:

Figure S1. 500 hPa geopotential anomalies for GC2C calculated against the ERA Interim reanalysis. The period is 1989–2008.

Figure S2. The SST anomalies for GC2C calculated against the observations (OIsst).

How to cite this article: Williams K., B. Hoskins, R. Lee, G. Masato, and T. Woollings (2016), A regime analysis of Atlantic winter jet variability applied to evaluate HadGEM3-GC2, *Q.J.R. Meteorol. Soc.*, 2017;00:1–6.

APPENDIX

A SECTION TITLE OF FIRST APPENDIX

Use `\begin{verbatim}... \end{verbatim}` for program codes without math. Use `\begin{alltt}... \end{alltt}` for program codes with math. Based on the text provided inside the optional argument of `\begin{code}[Pseudocode|Listing|Box|Code|Specification|Procedure|Sourcecode|Program]... \end{code}` tag corresponding boxed like floats are generated. Also note that `\begin{code}[Code|Listing]... \end{code}` tag with either Code or Listing text as optional argument text are set with computer modern typewriter font. All other code environments are set with normal text font. Refer below example:

Listing 1: Descriptive Caption Text

```
for i:=maxint to 0 do
begin
{ do nothing }
end;
Write('Case insensitive ');
Write('Pascal keywords.');
```

A.1 Subsection title of first appendix

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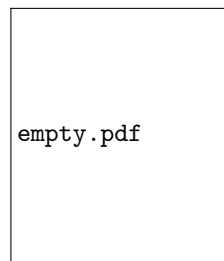
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FIGURE B1 This is an example for appendix figure.

A.1.1 Subsection title of first appendix

Unnumbered figure



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B SECTION TITLE OF SECOND APPENDIX

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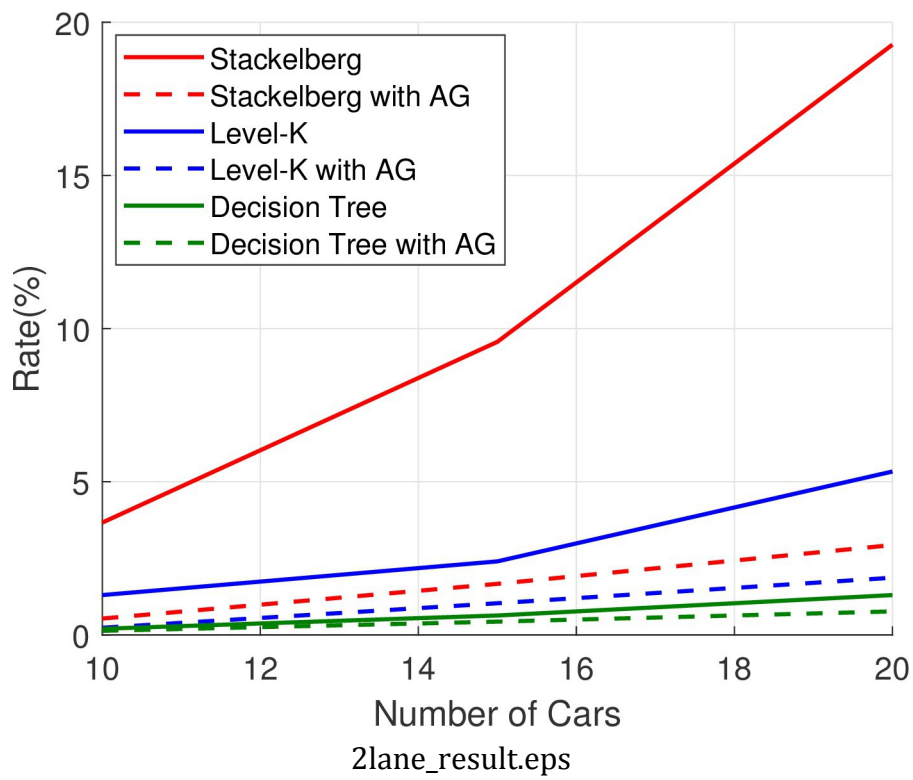
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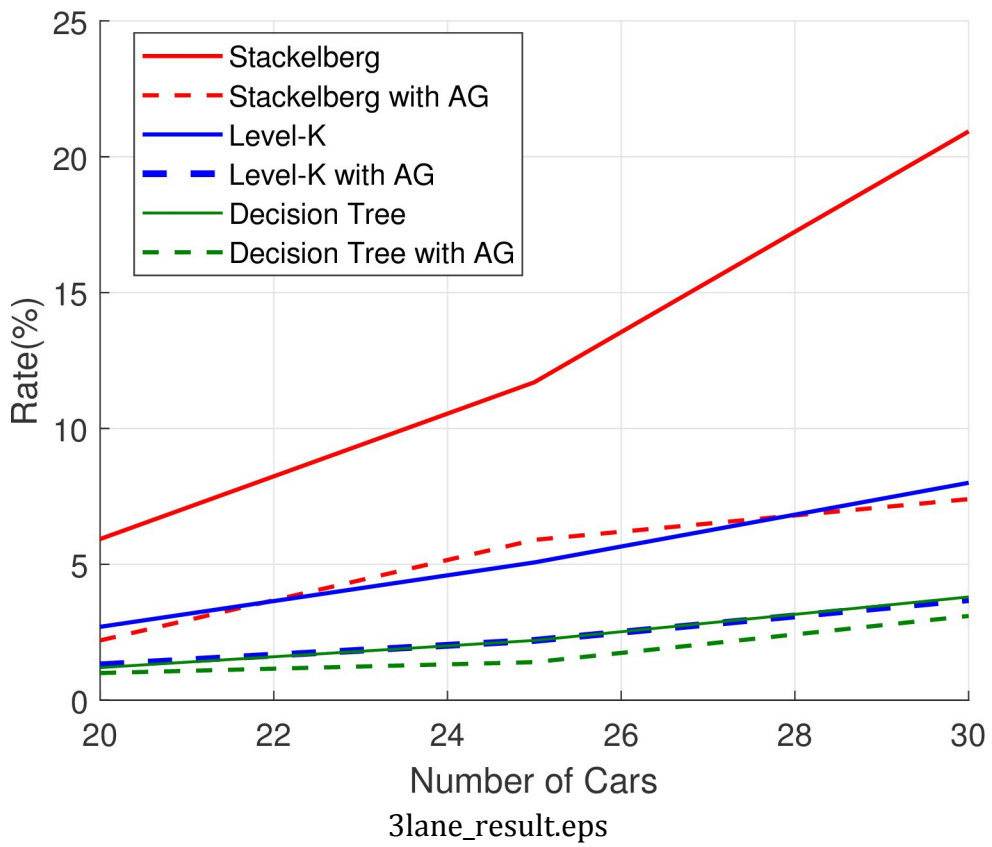
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Advanced Control for Applications:

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Authors: Kyoungseok Han, Nan Li, Eric Tseng, Dimitar Filev, Ilya Kolmanovsky, and Anouck Girard.

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School of Mechanical Engineering, Kyungpook National University

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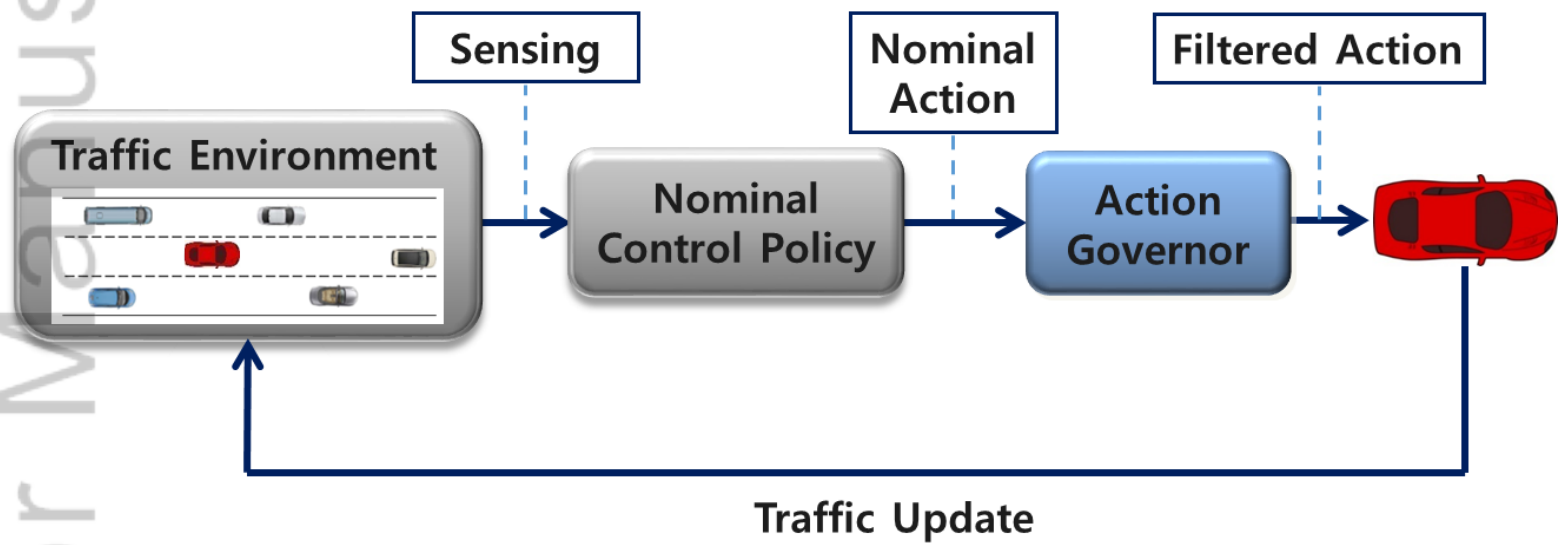
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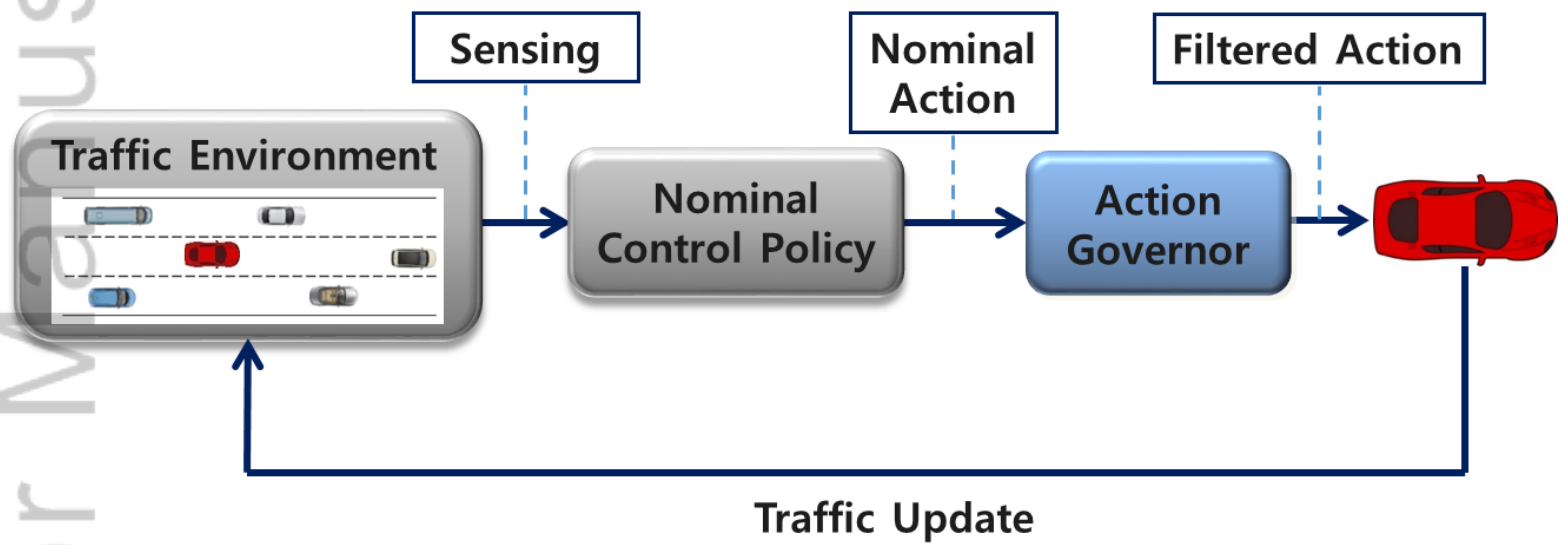
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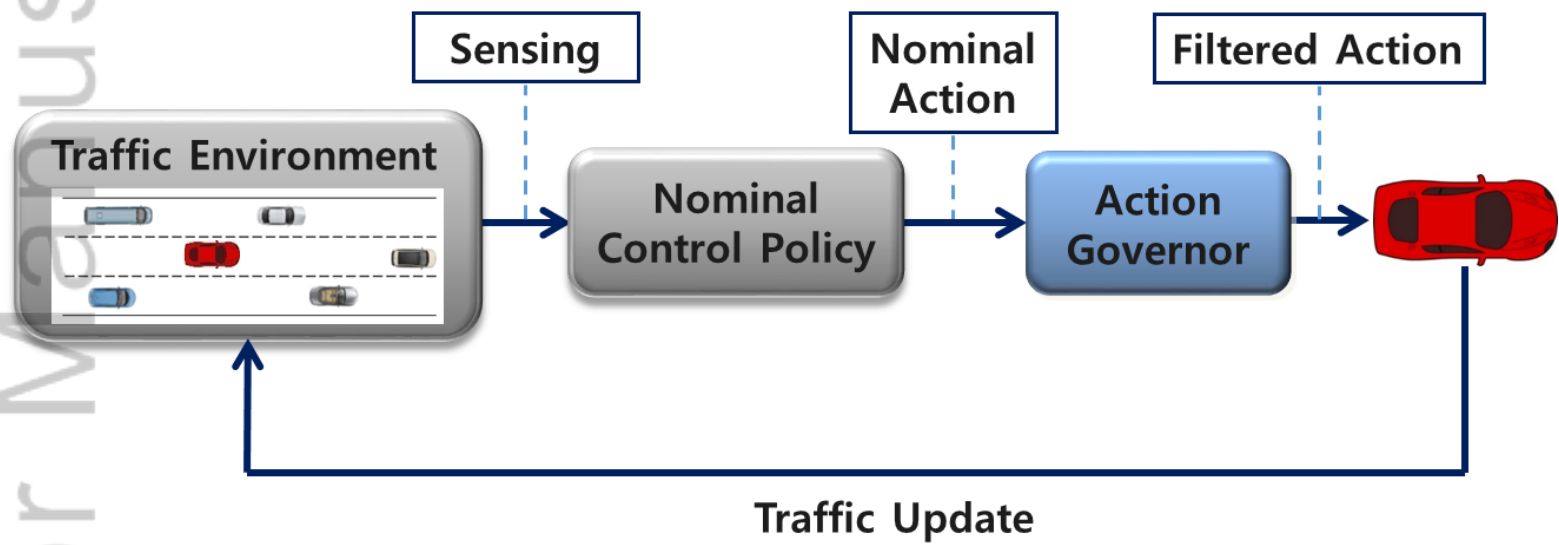
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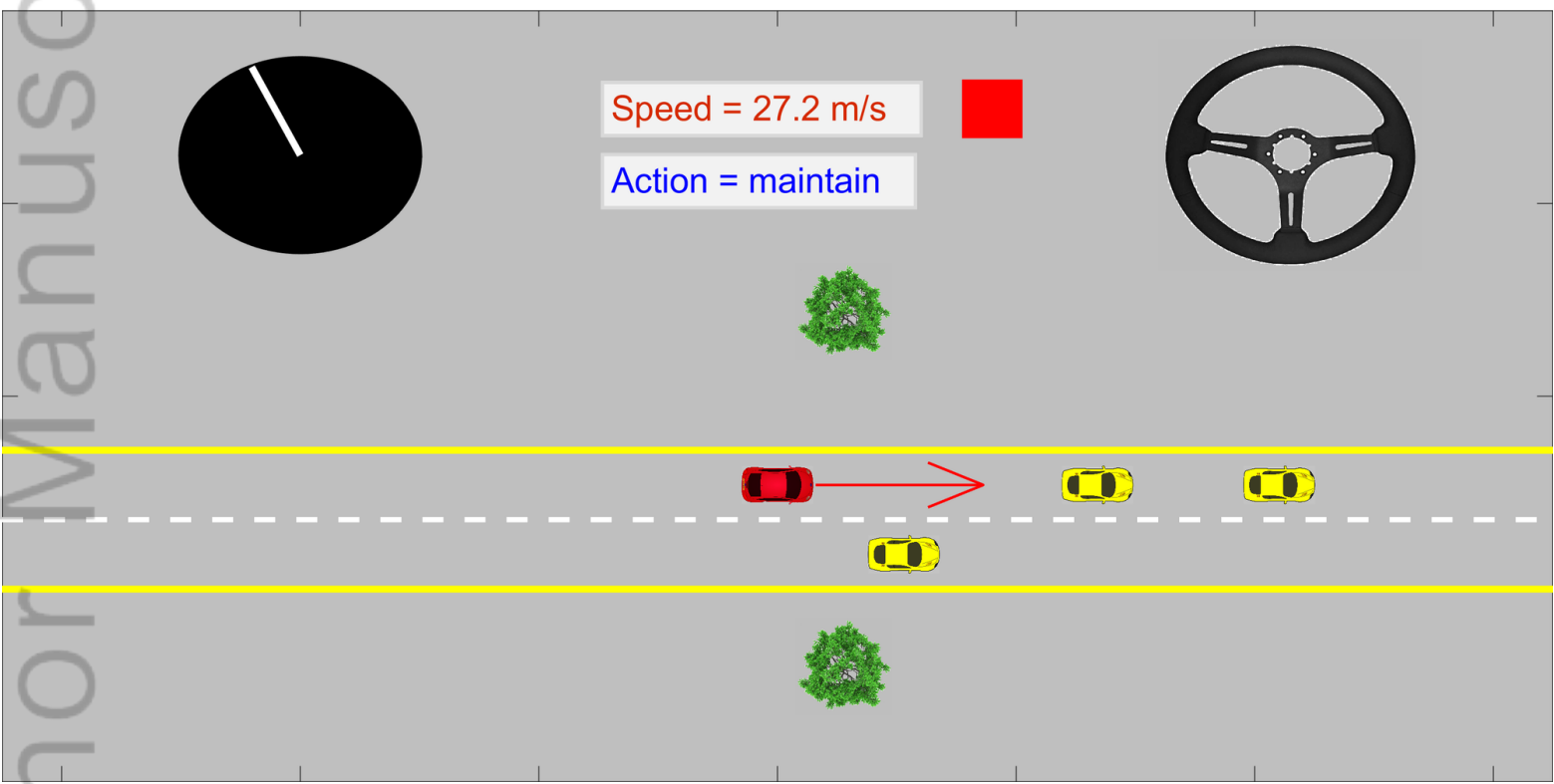


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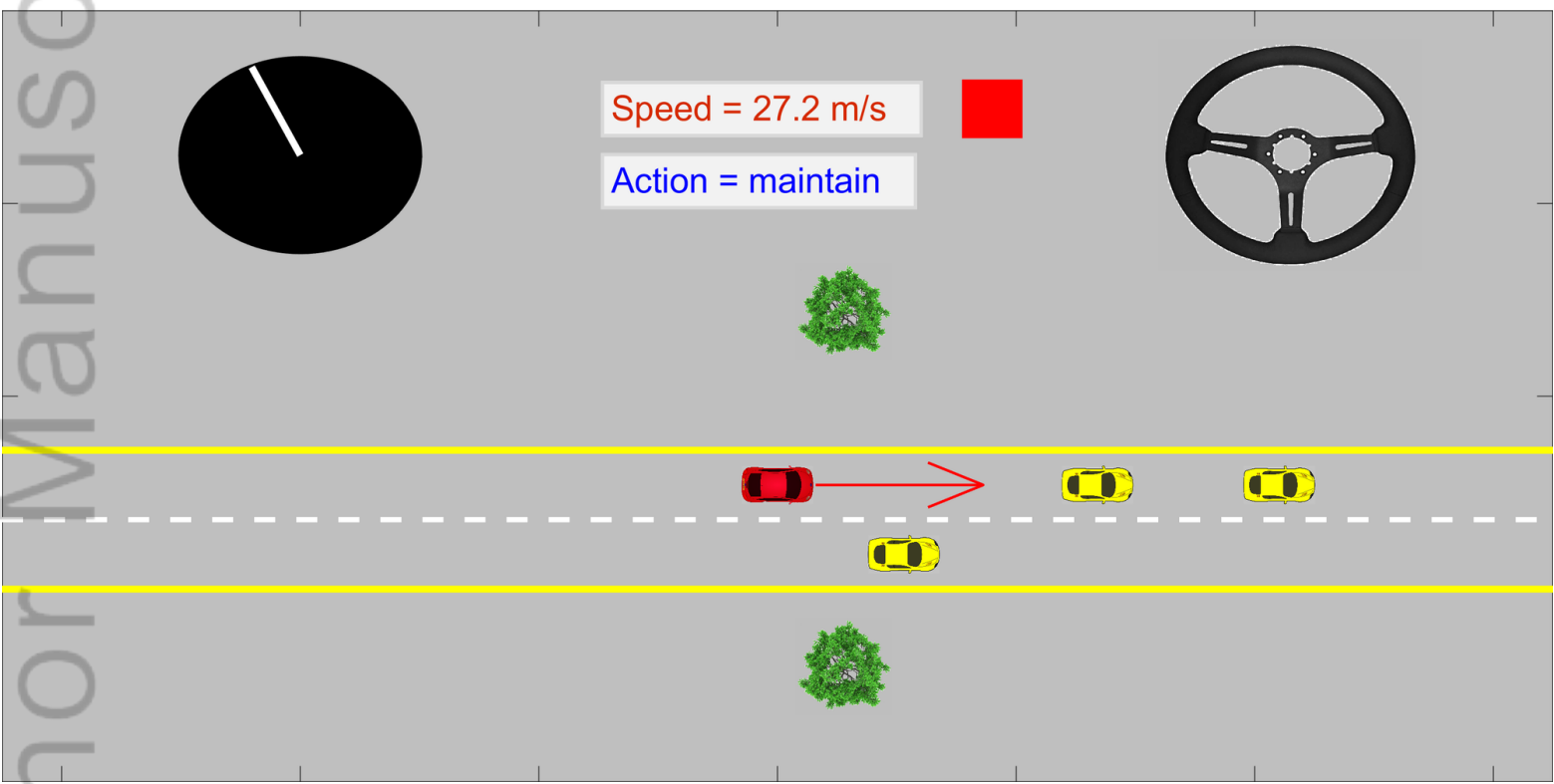
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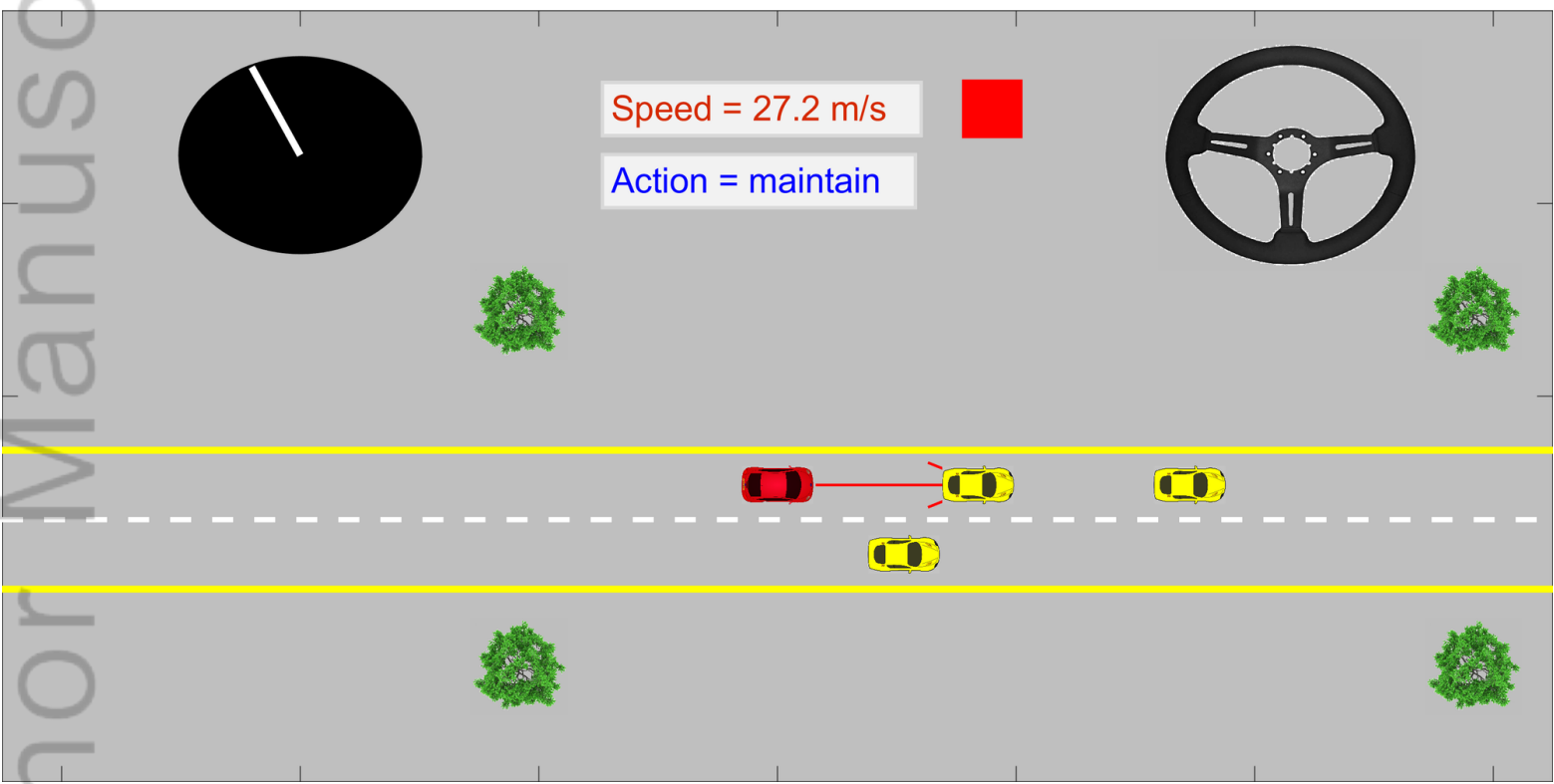
architecture.tiff



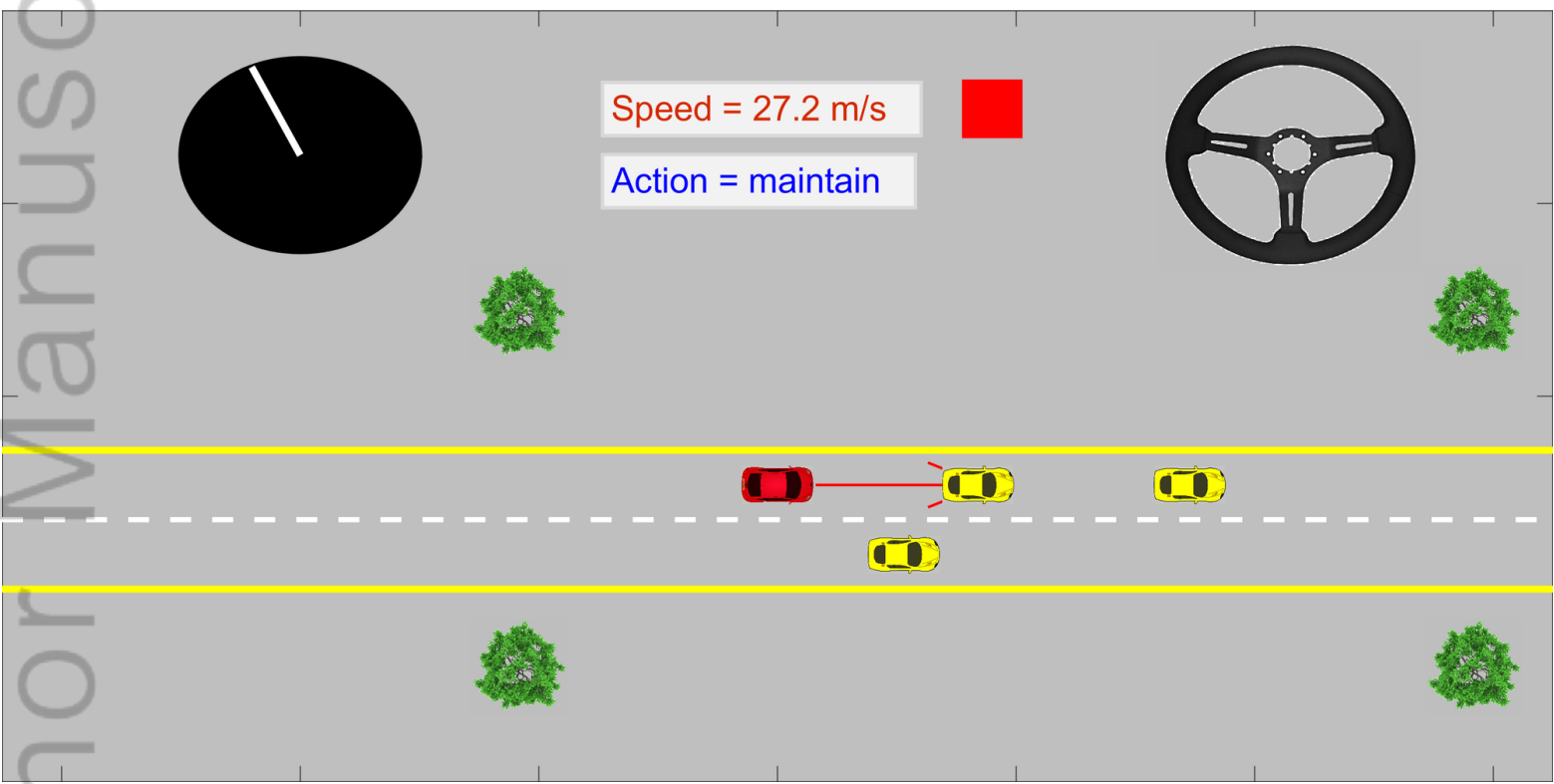
col_2lane_29.png



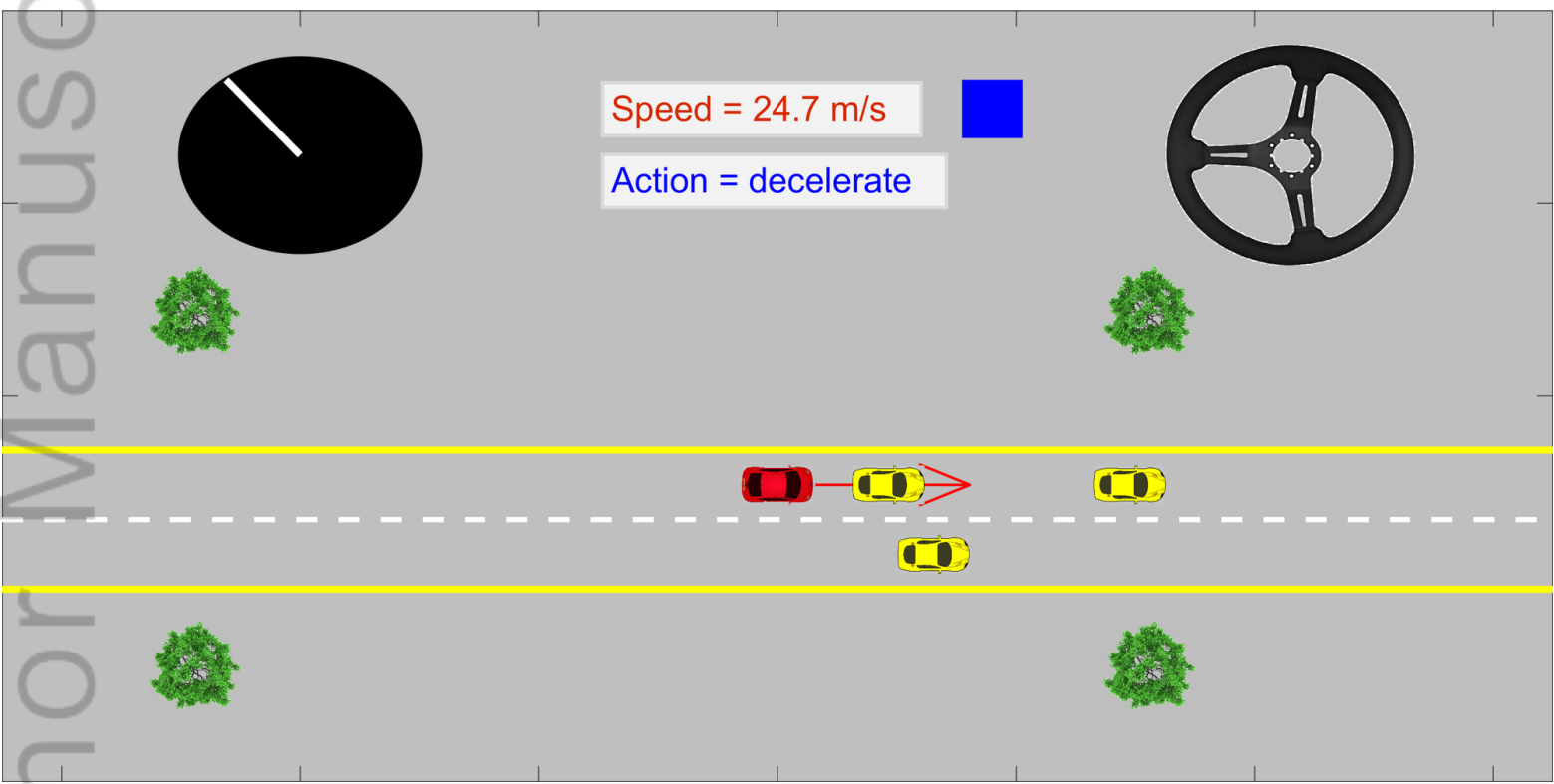
col_2lane_29.png



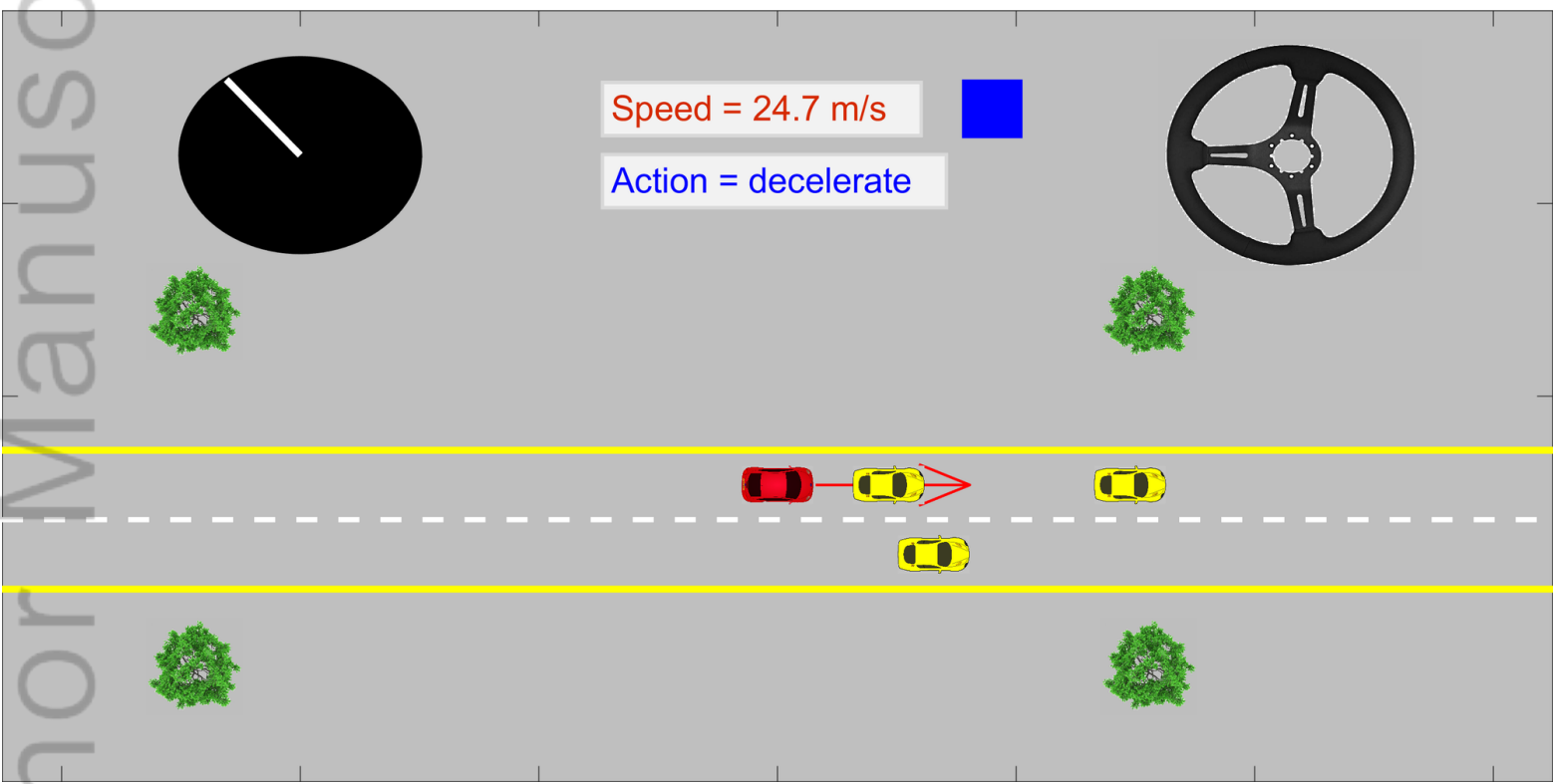
col_2lane_30.png



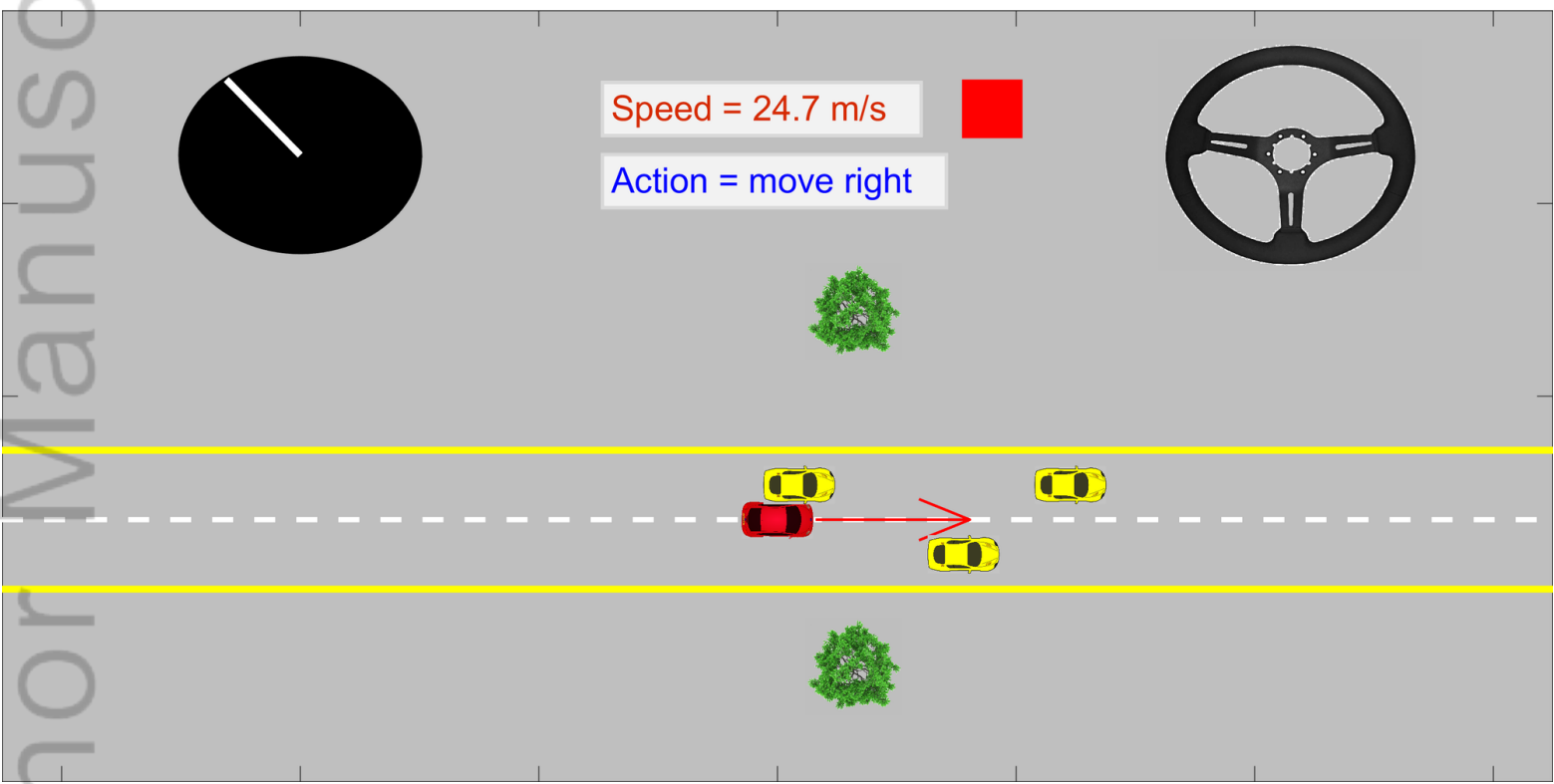
col_2lane_30.png



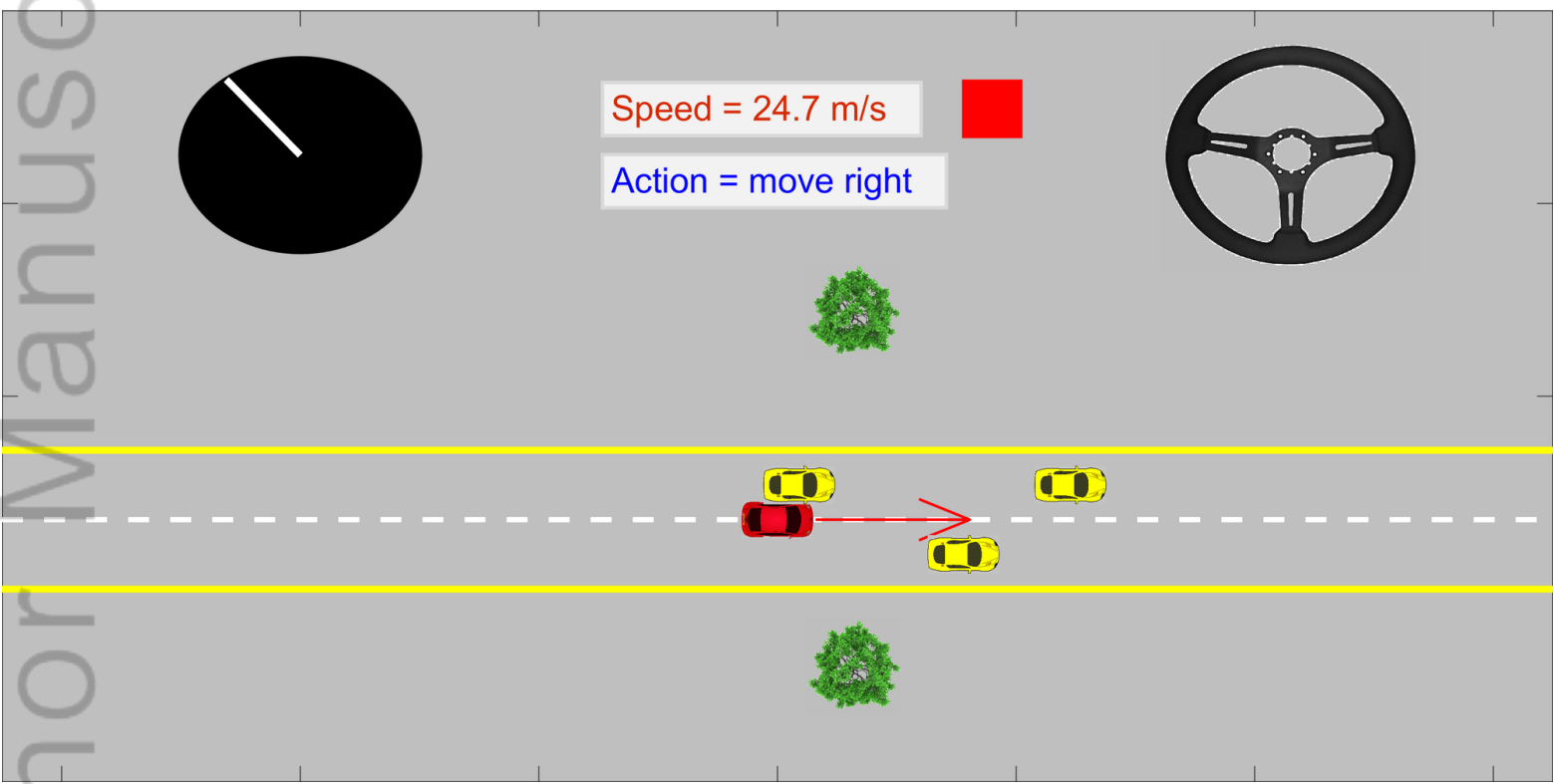
col_2lane_31.png



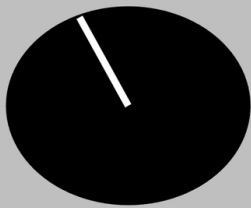
col_2lane_31.png



col_2lane_32.png



col_2lane_32.png



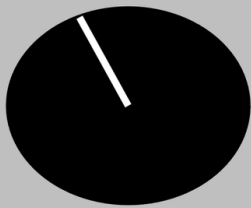
Speed = 27.2 m/s



Action = move right



col_3lane_168.png



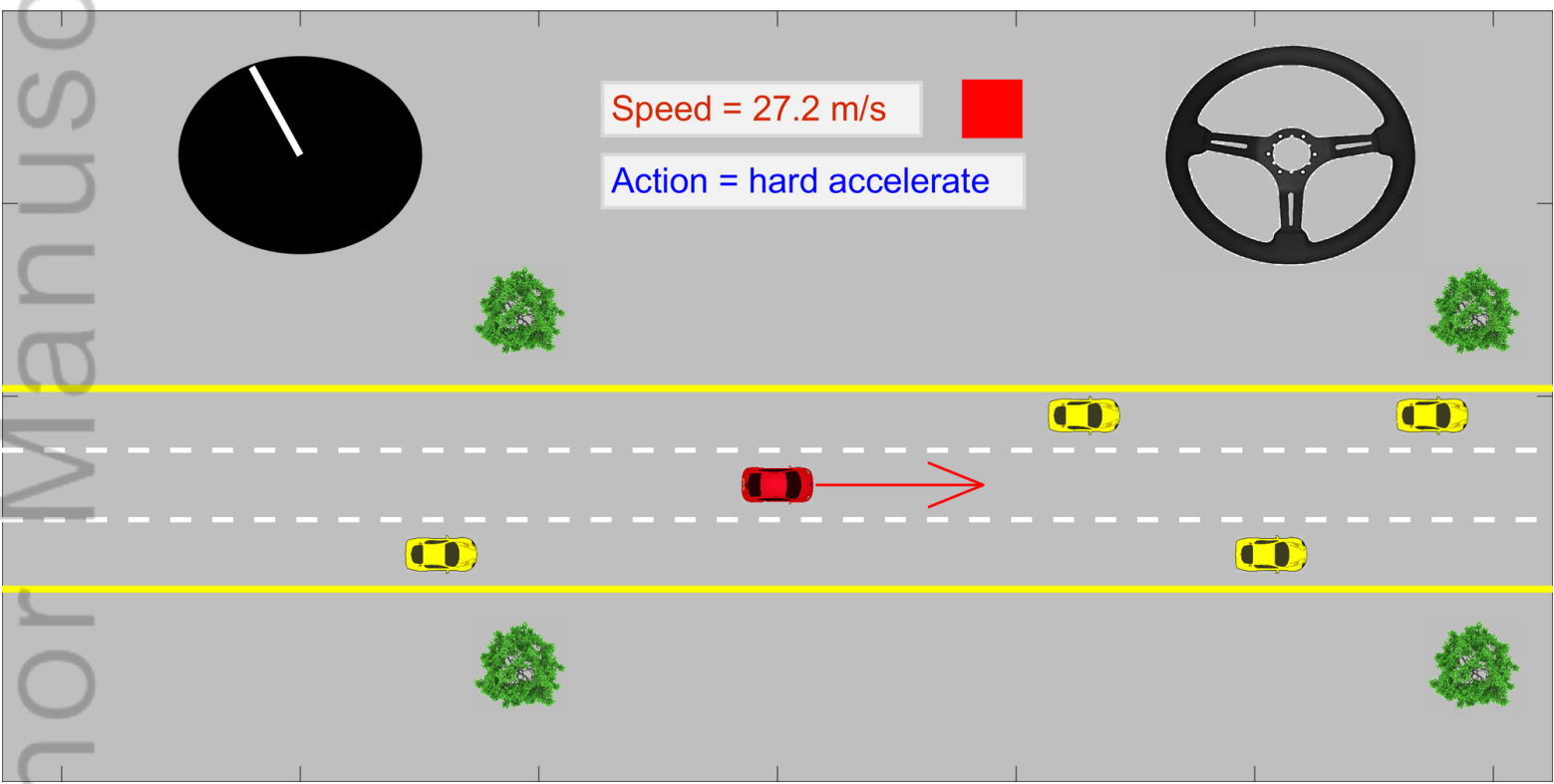
Speed = 27.2 m/s



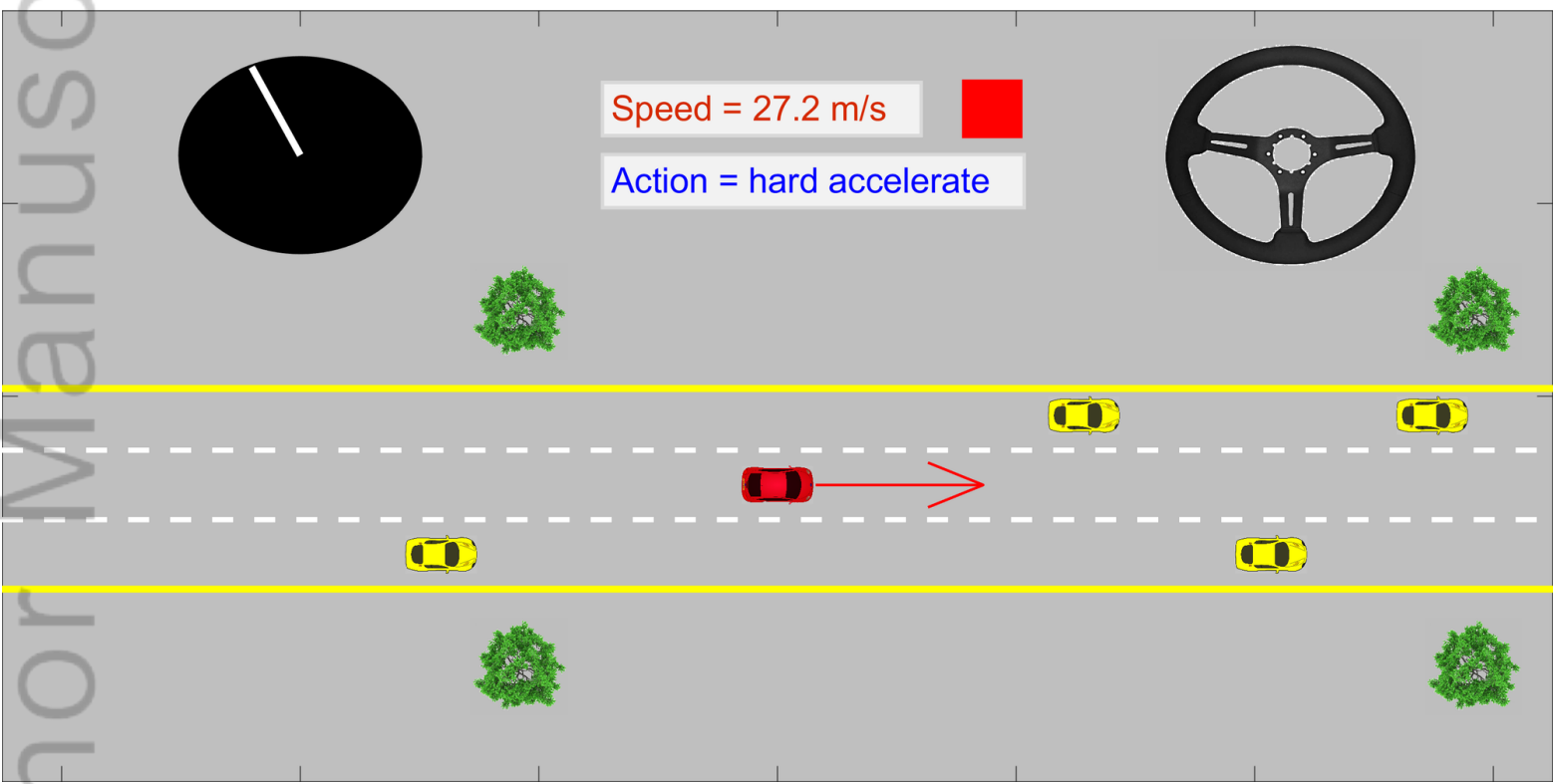
Action = move right



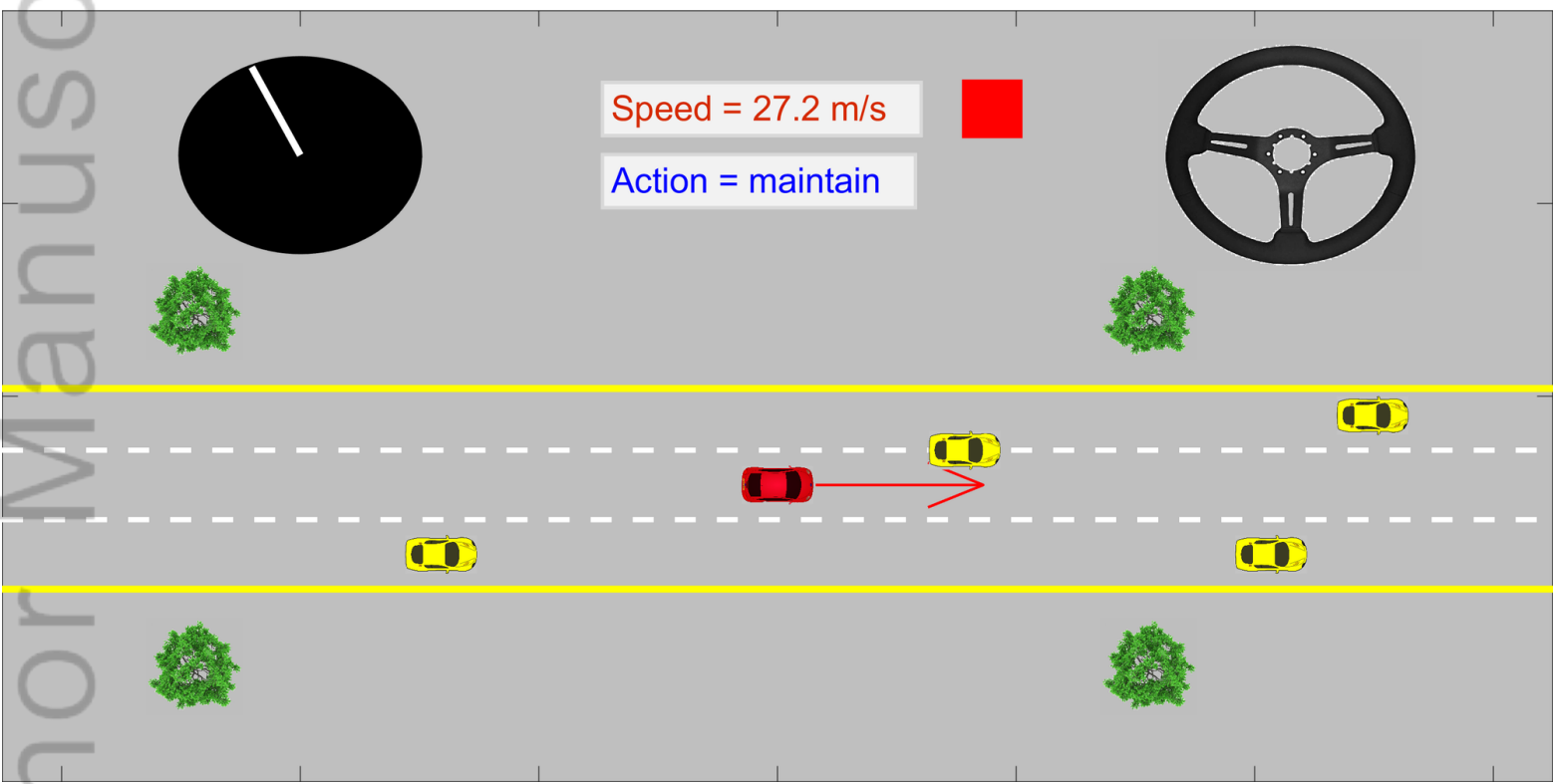
col_3lane_168.png



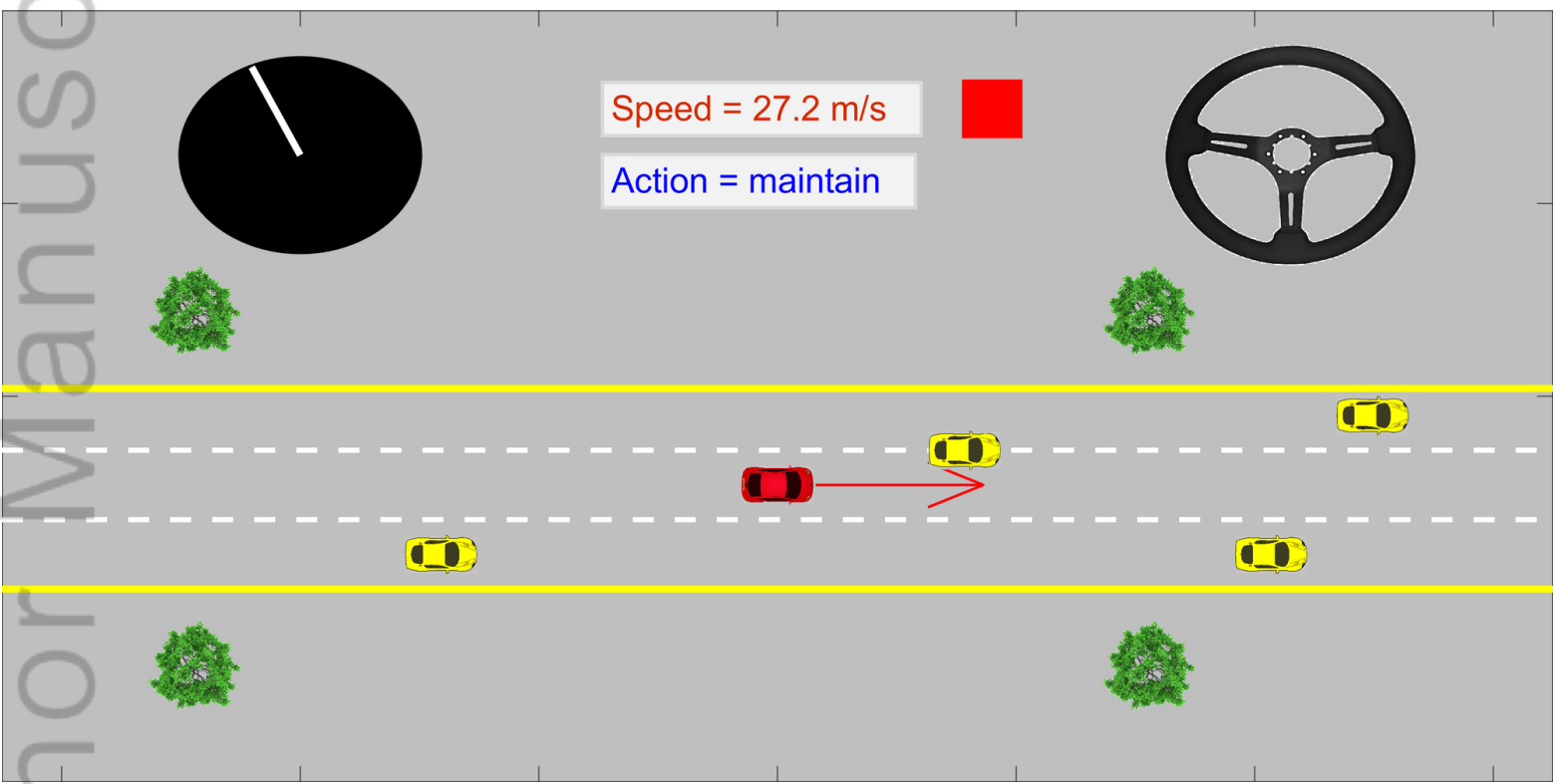
col_3lane_169.png



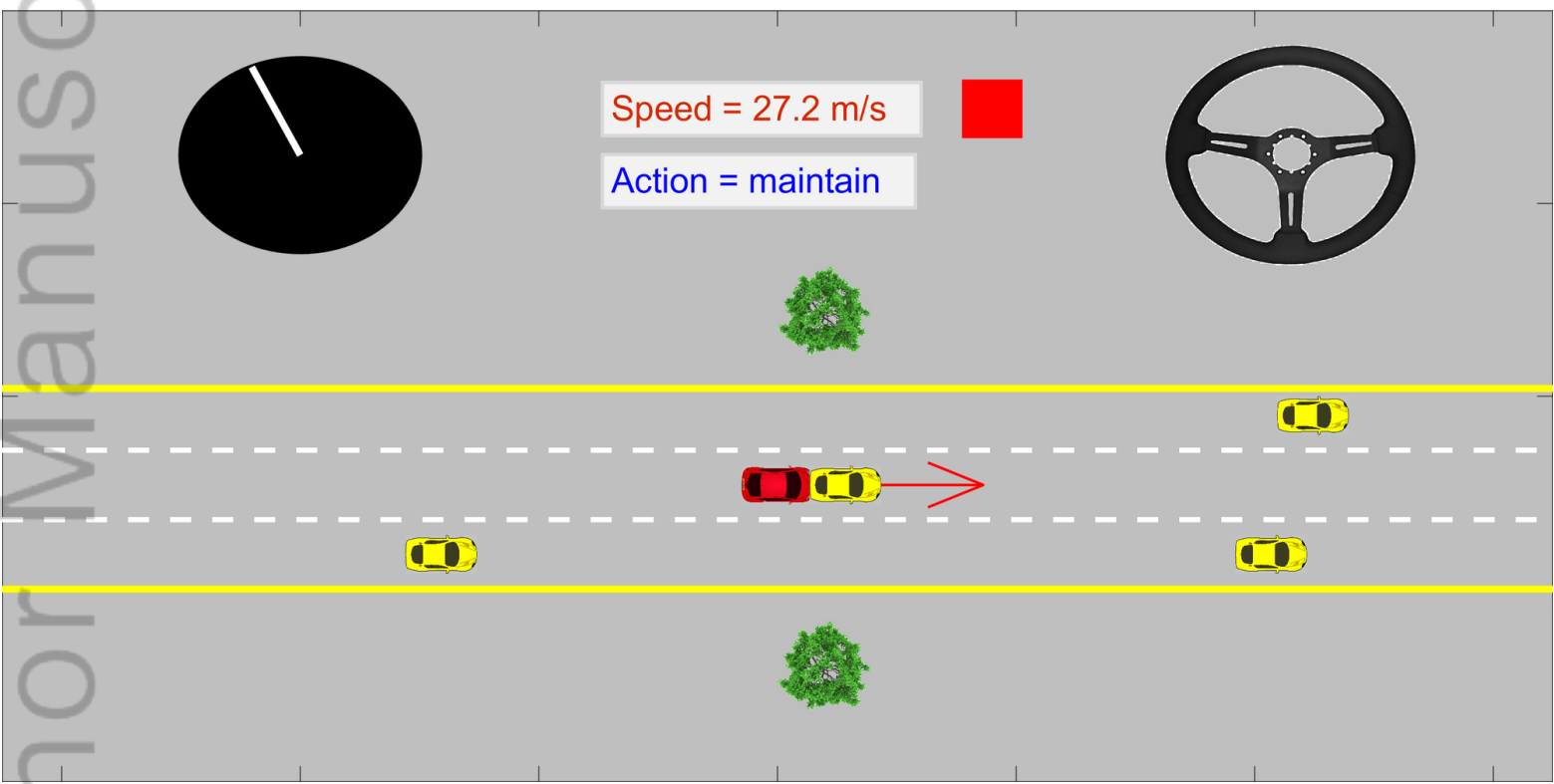
col_3lane_169.png



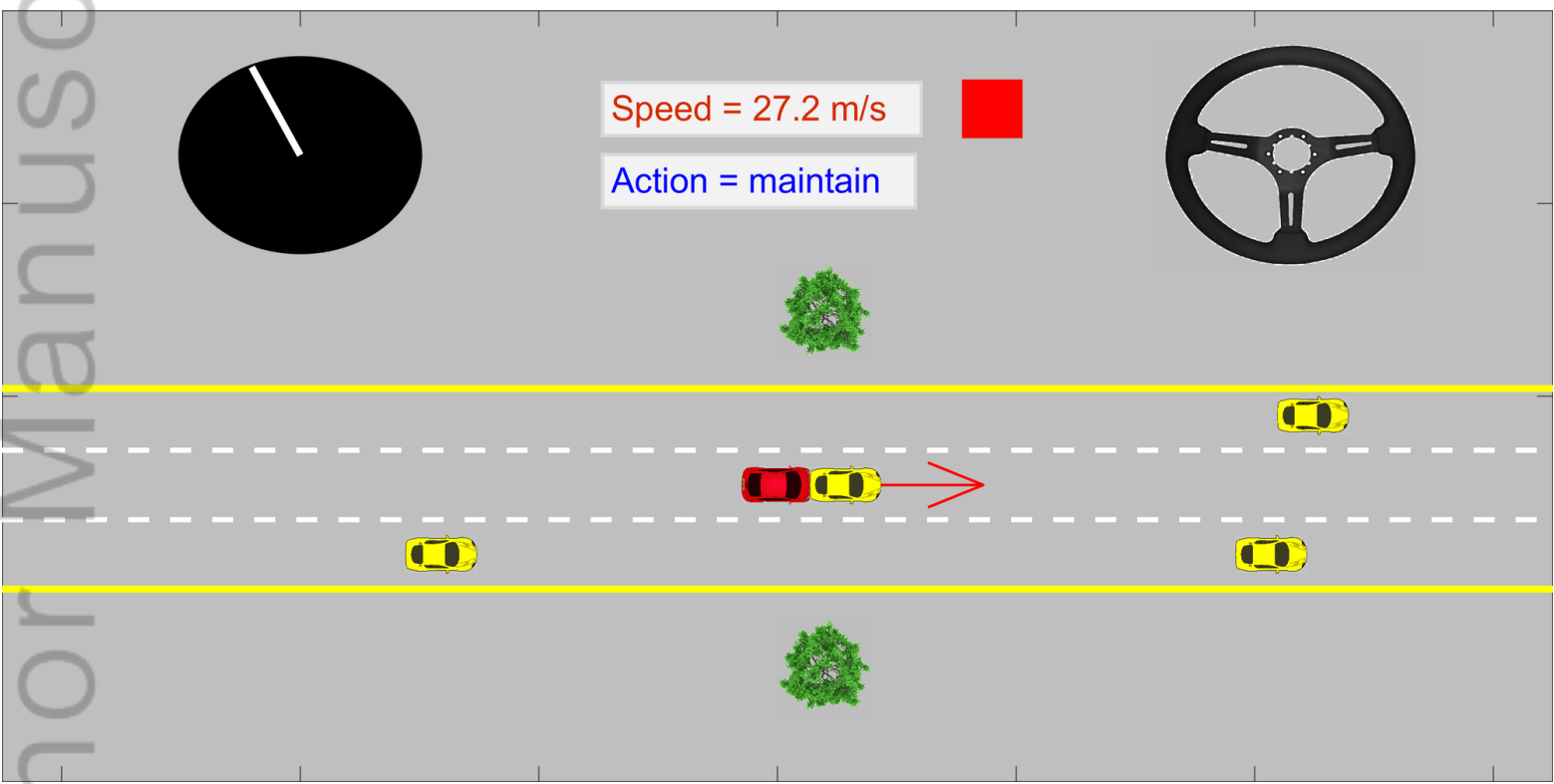
col_3lane_170.png



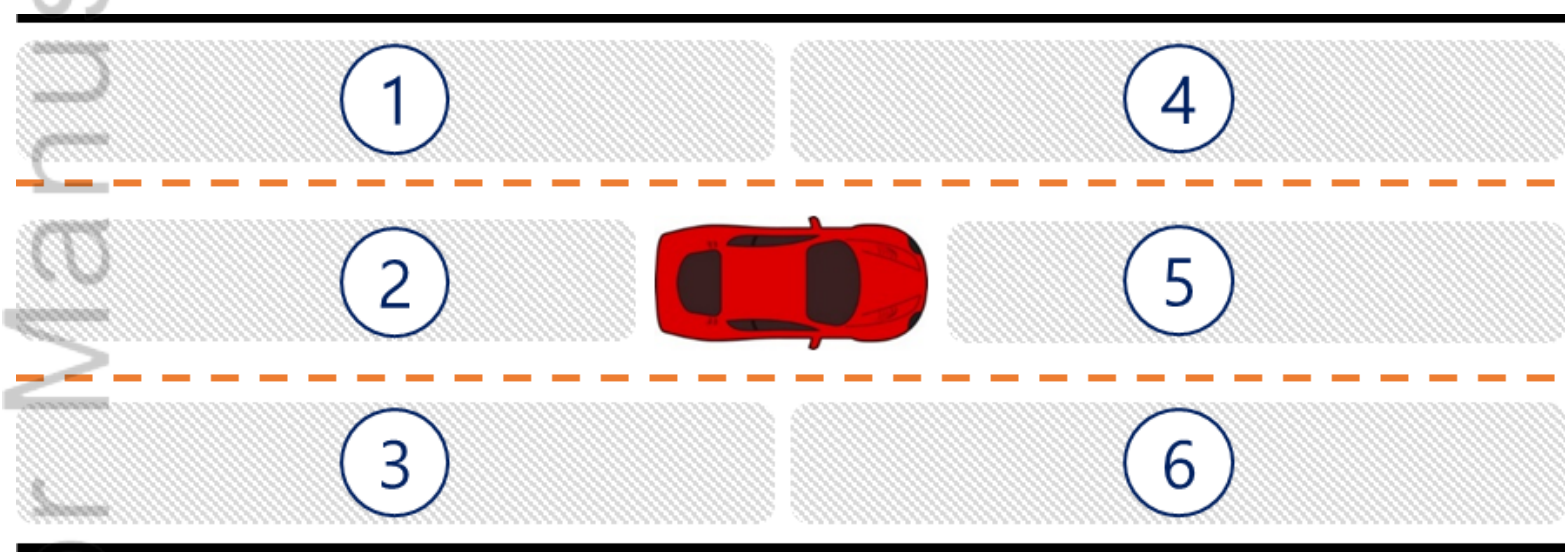
col_3lane_170.png



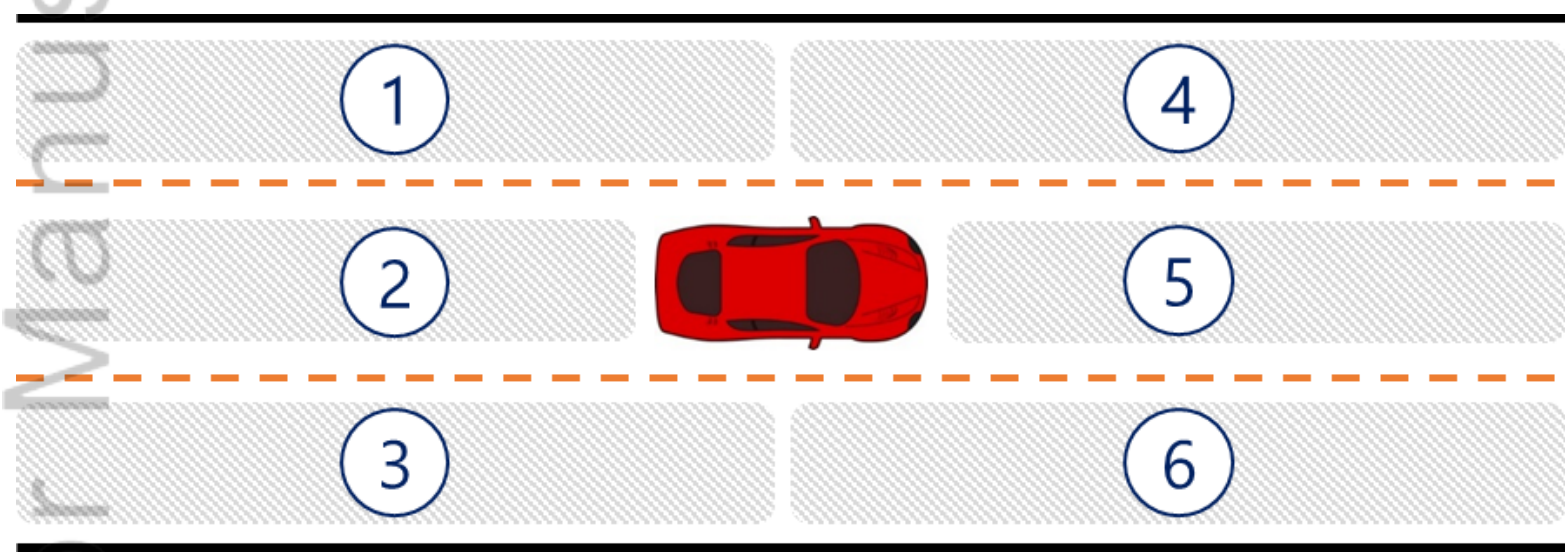
col_3lane_171.png



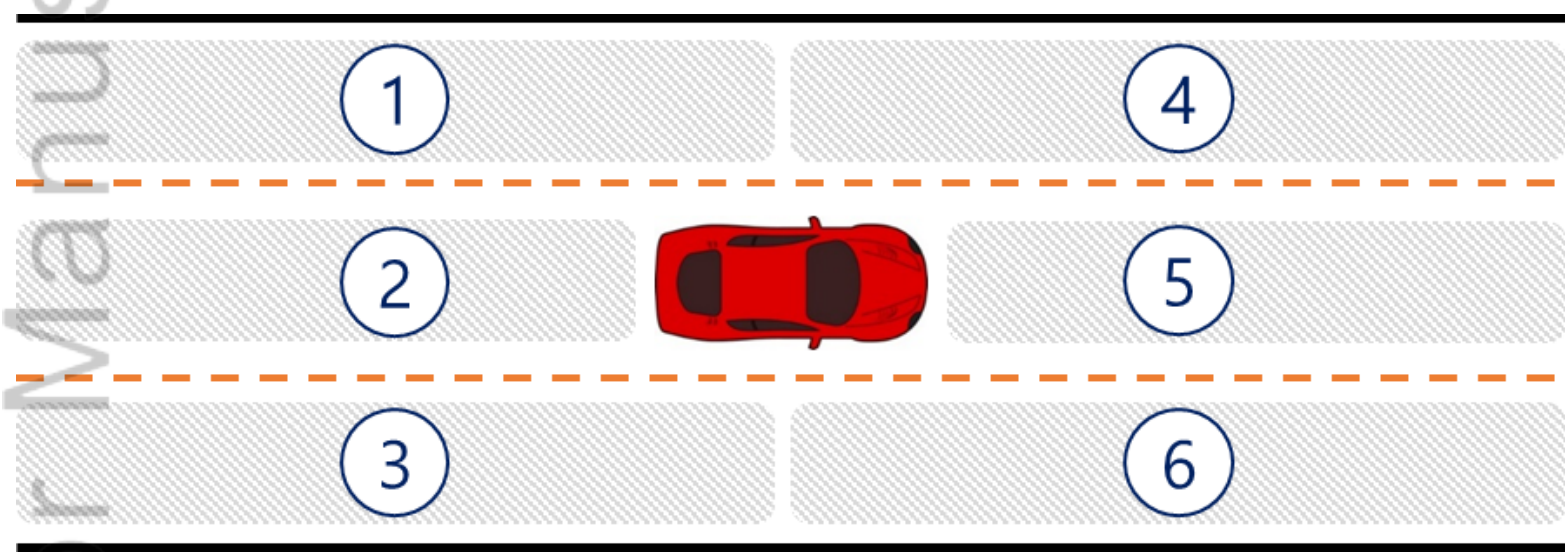
col_3lane_171.png



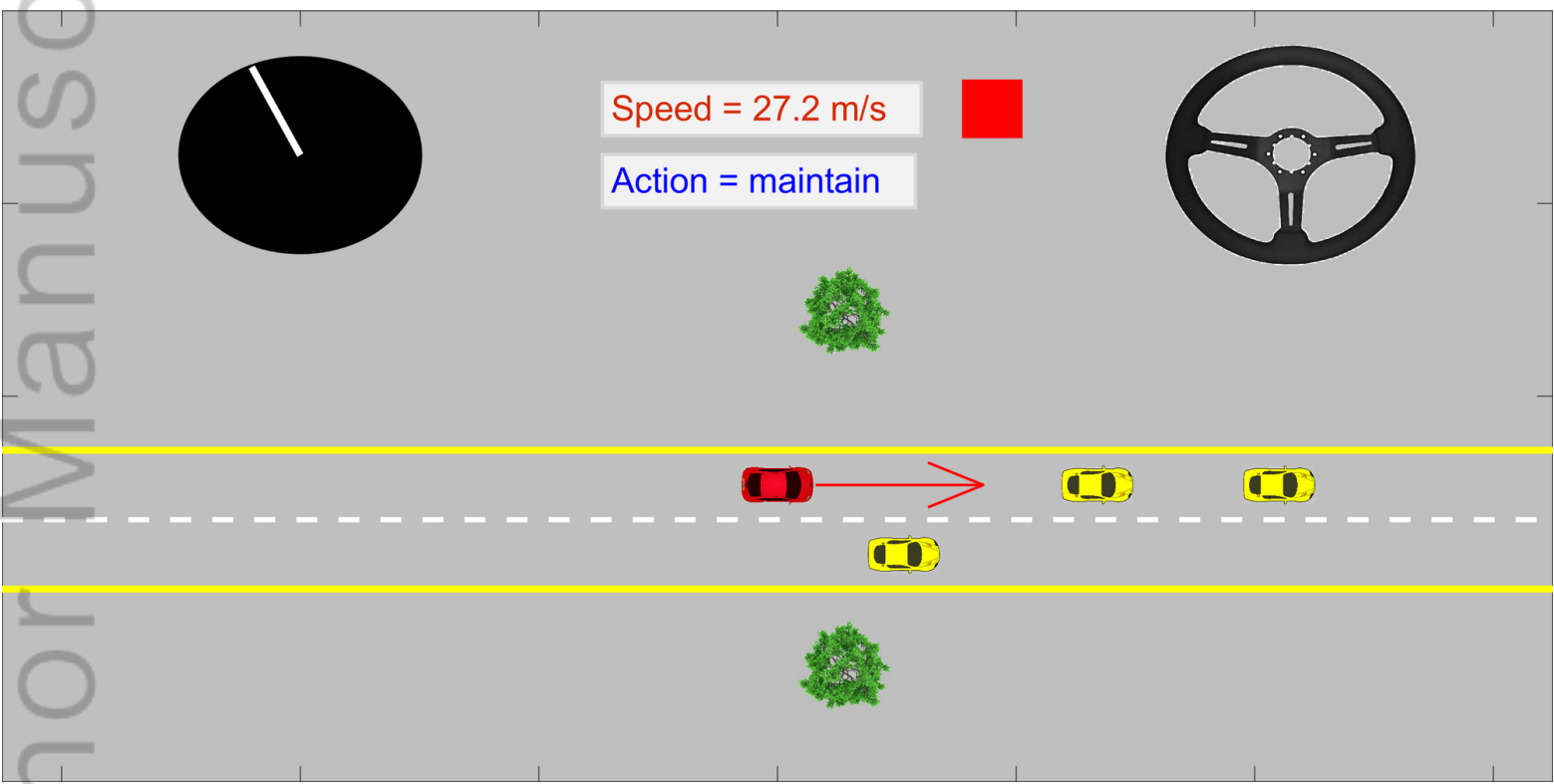
message.tiff



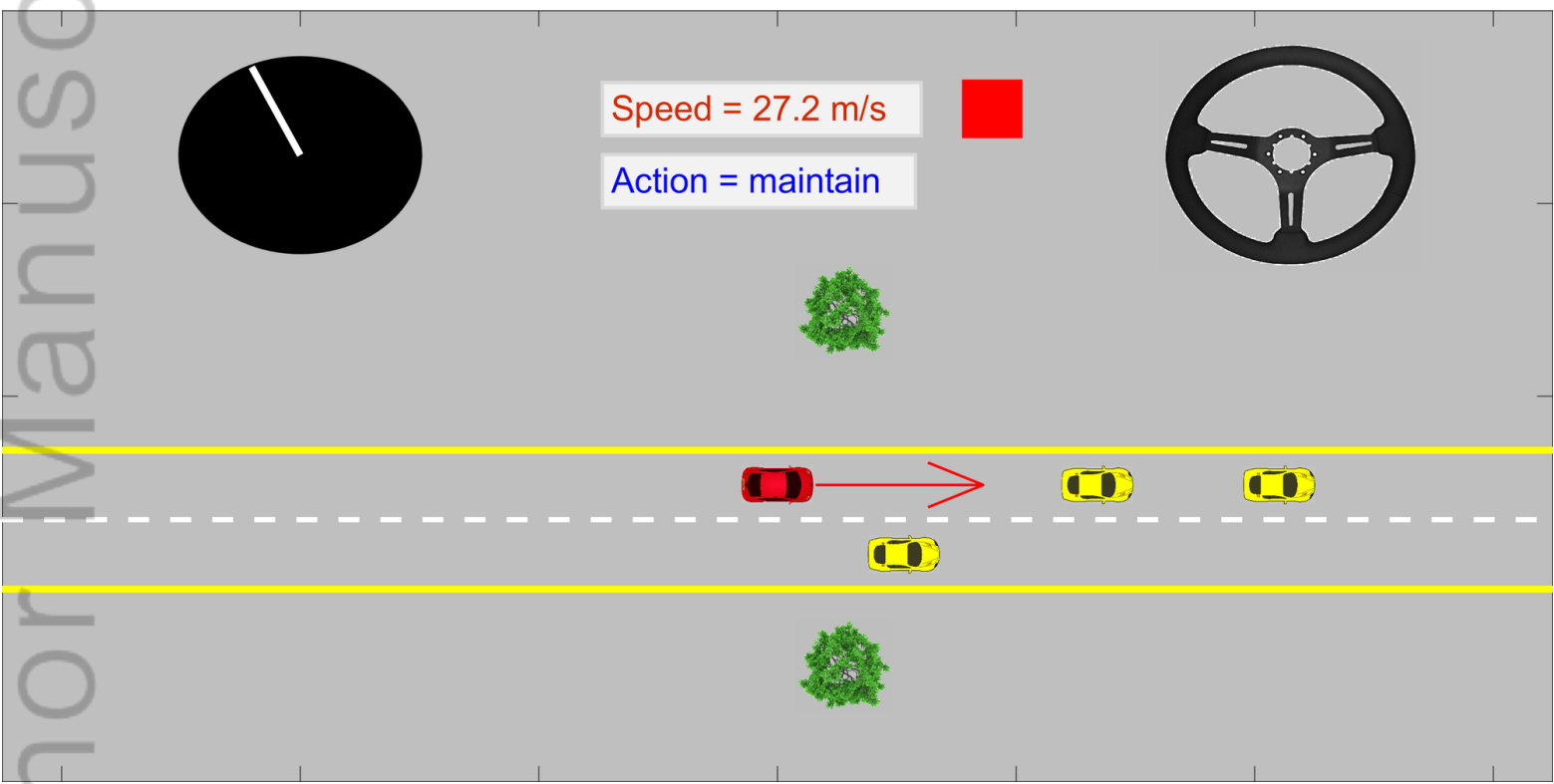
message.tiff



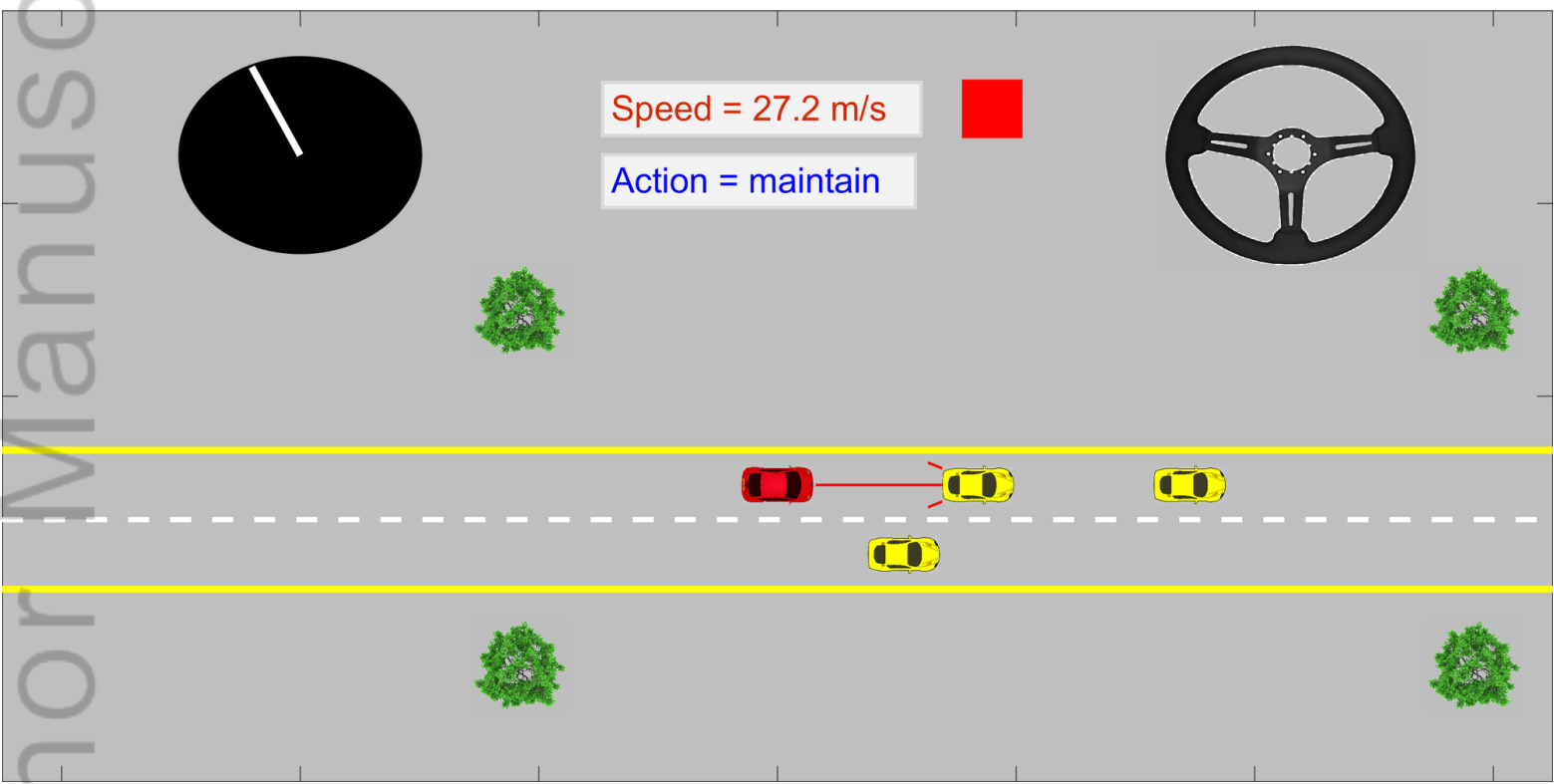
message.tiff



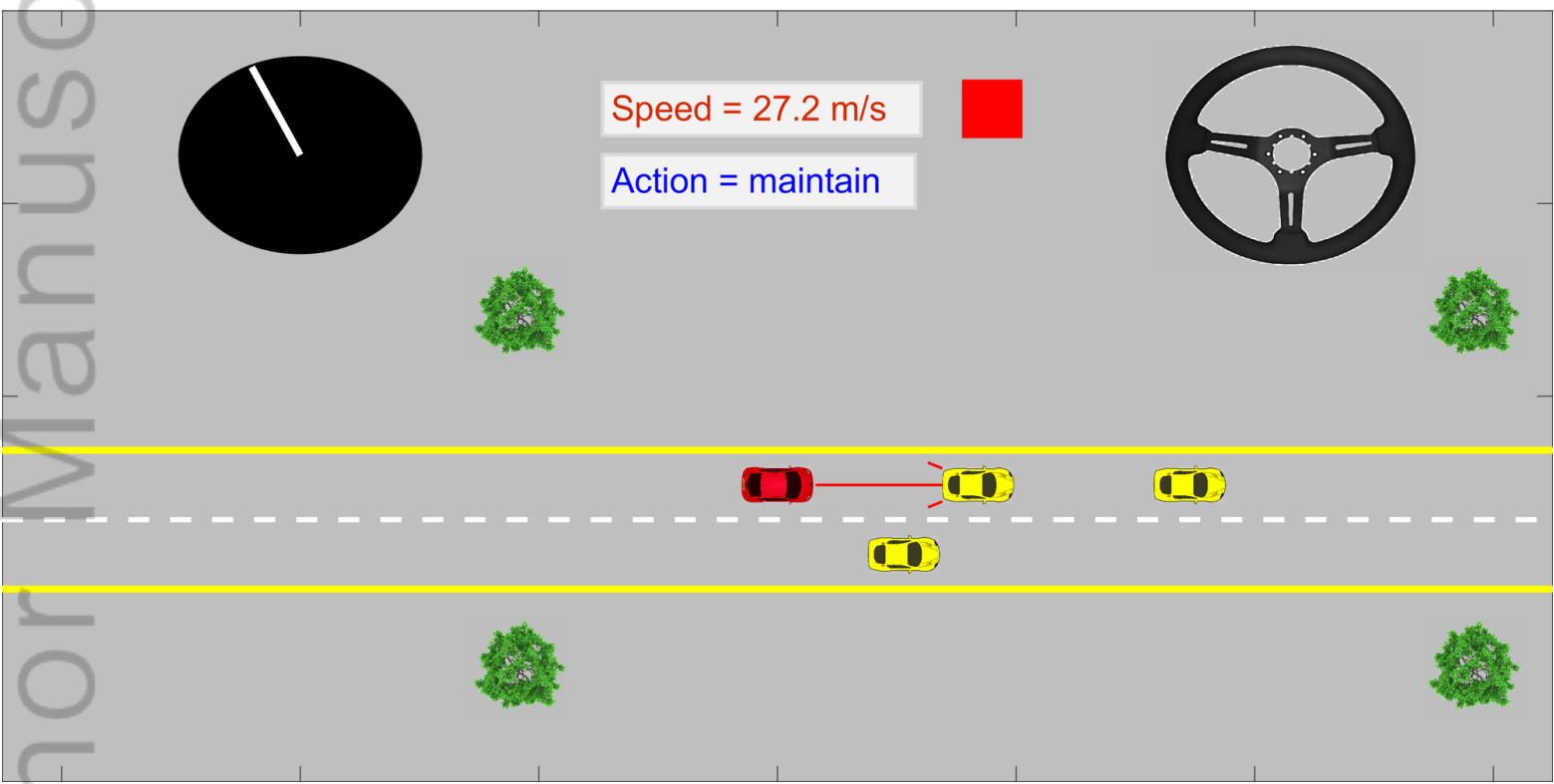
no_col_2lane_29.png



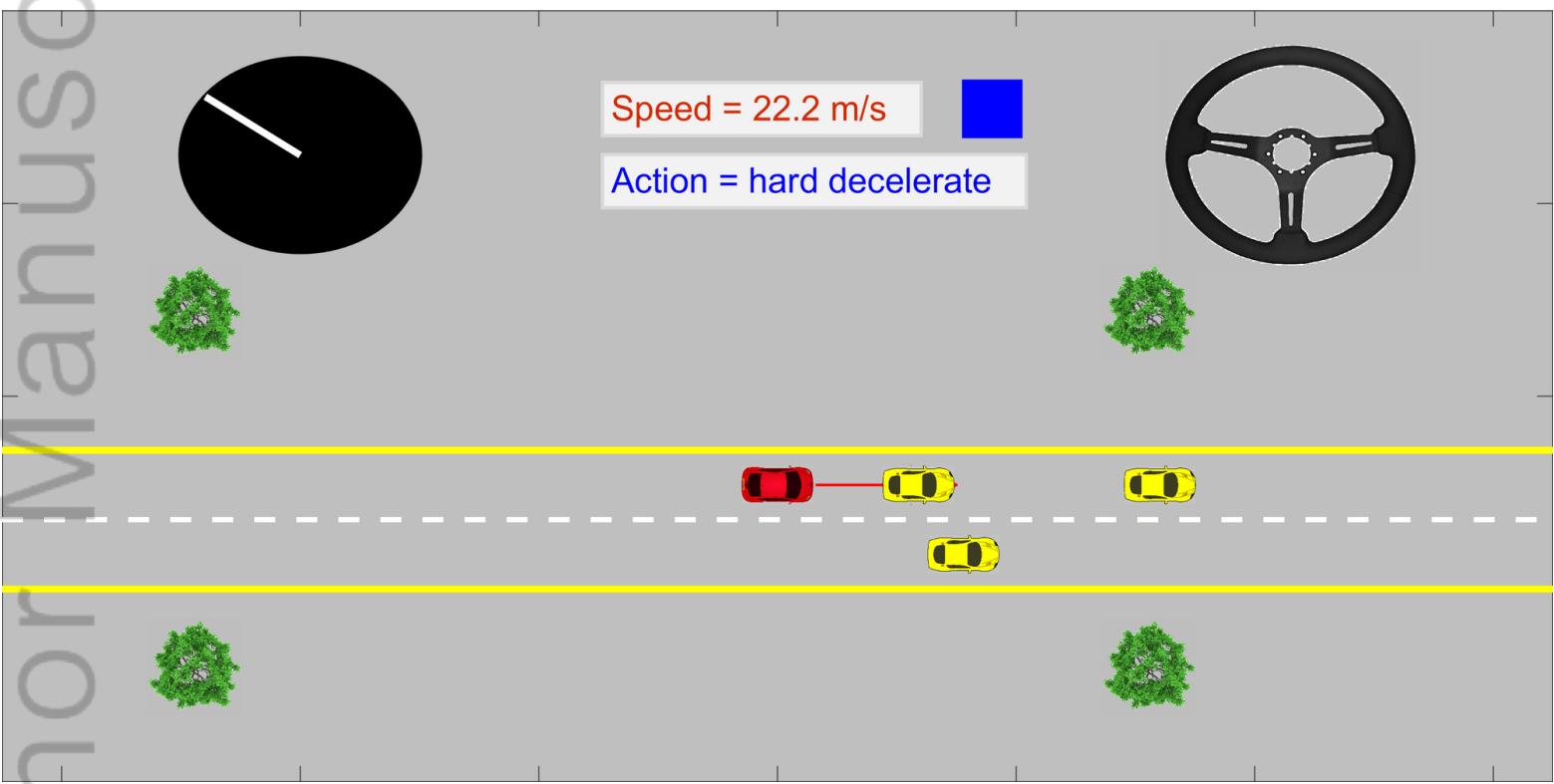
no_col_2lane_29.png



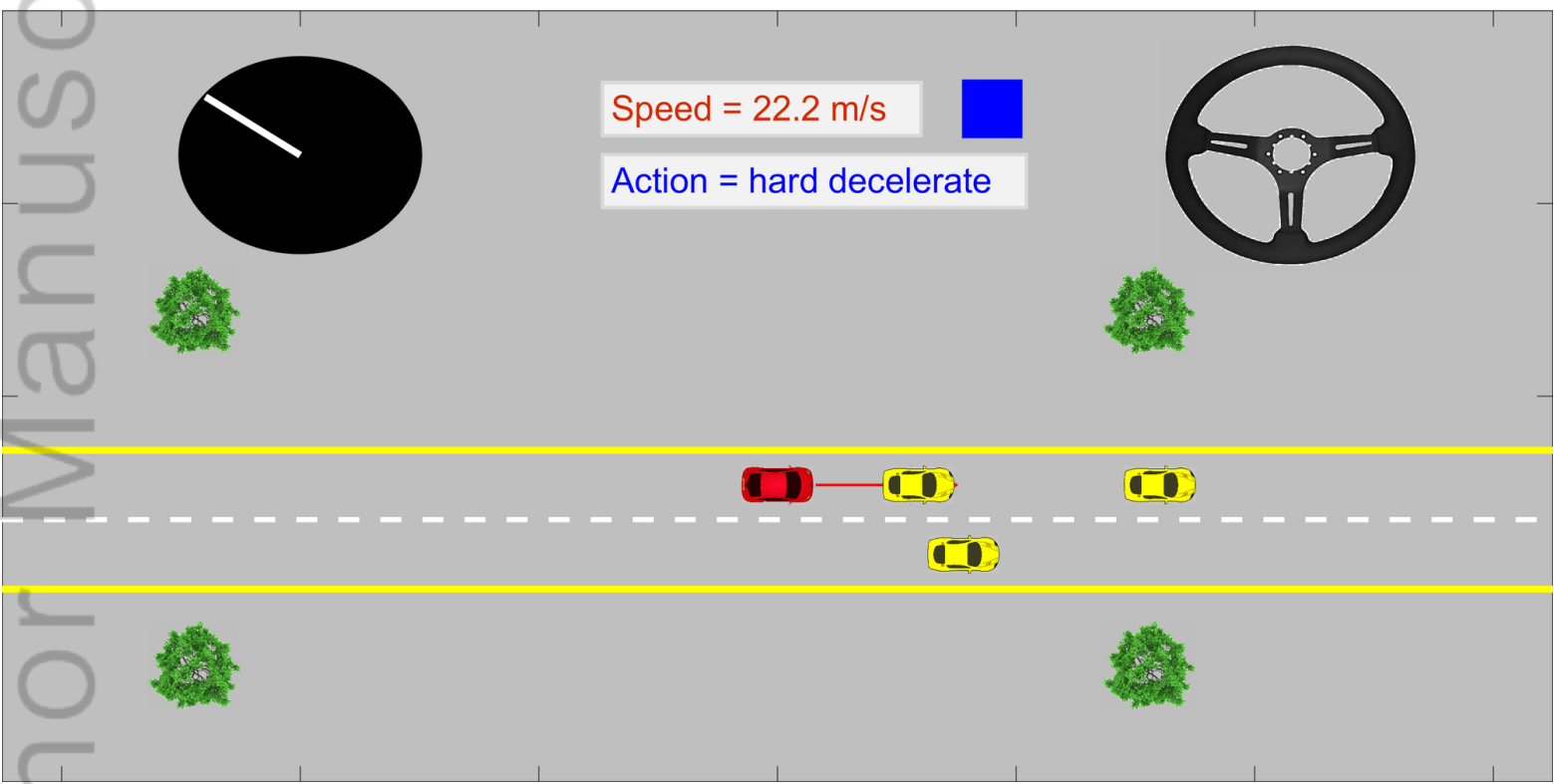
no_col_2lane_30.png



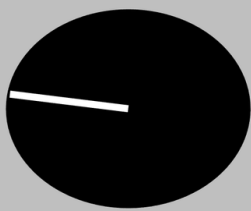
no_col_2lane_30.png



no_col_2lane_31.png



no_col_2lane_31.png



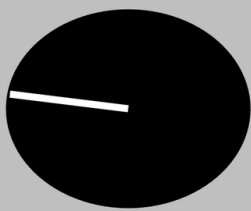
Speed = 17.2 m/s



Action = hard decelerate



no_col_2lane_32.png



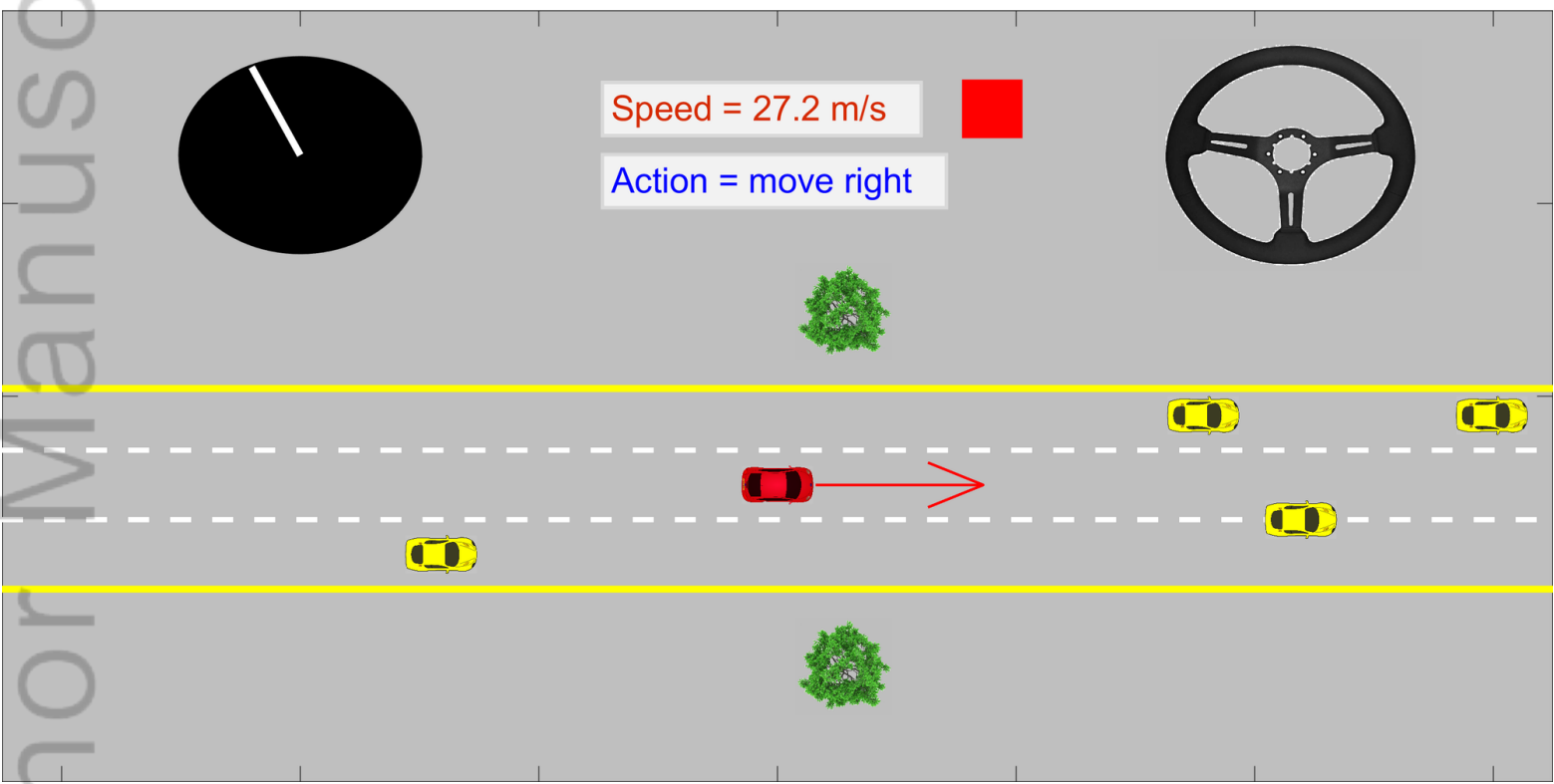
Speed = 17.2 m/s



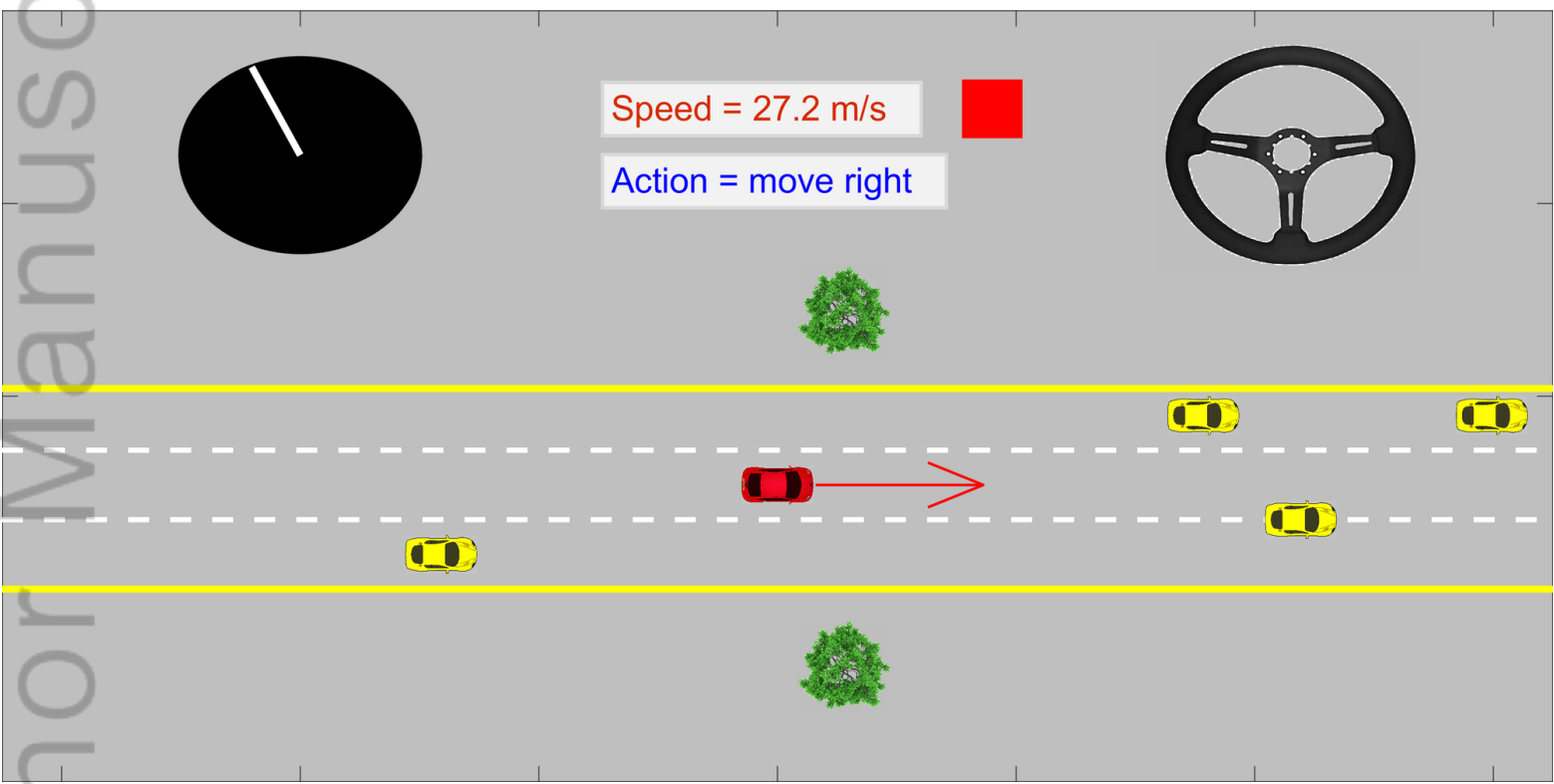
Action = hard decelerate



no_col_2lane_32.png

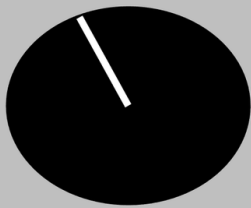


no_col_3lane_168.png



no_col_3lane_168.png

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Speed = 27.2 m/s

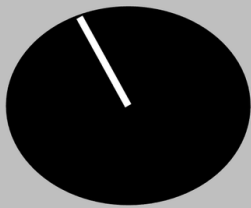


Action = hard accelerate



no_col_3lane_169.png

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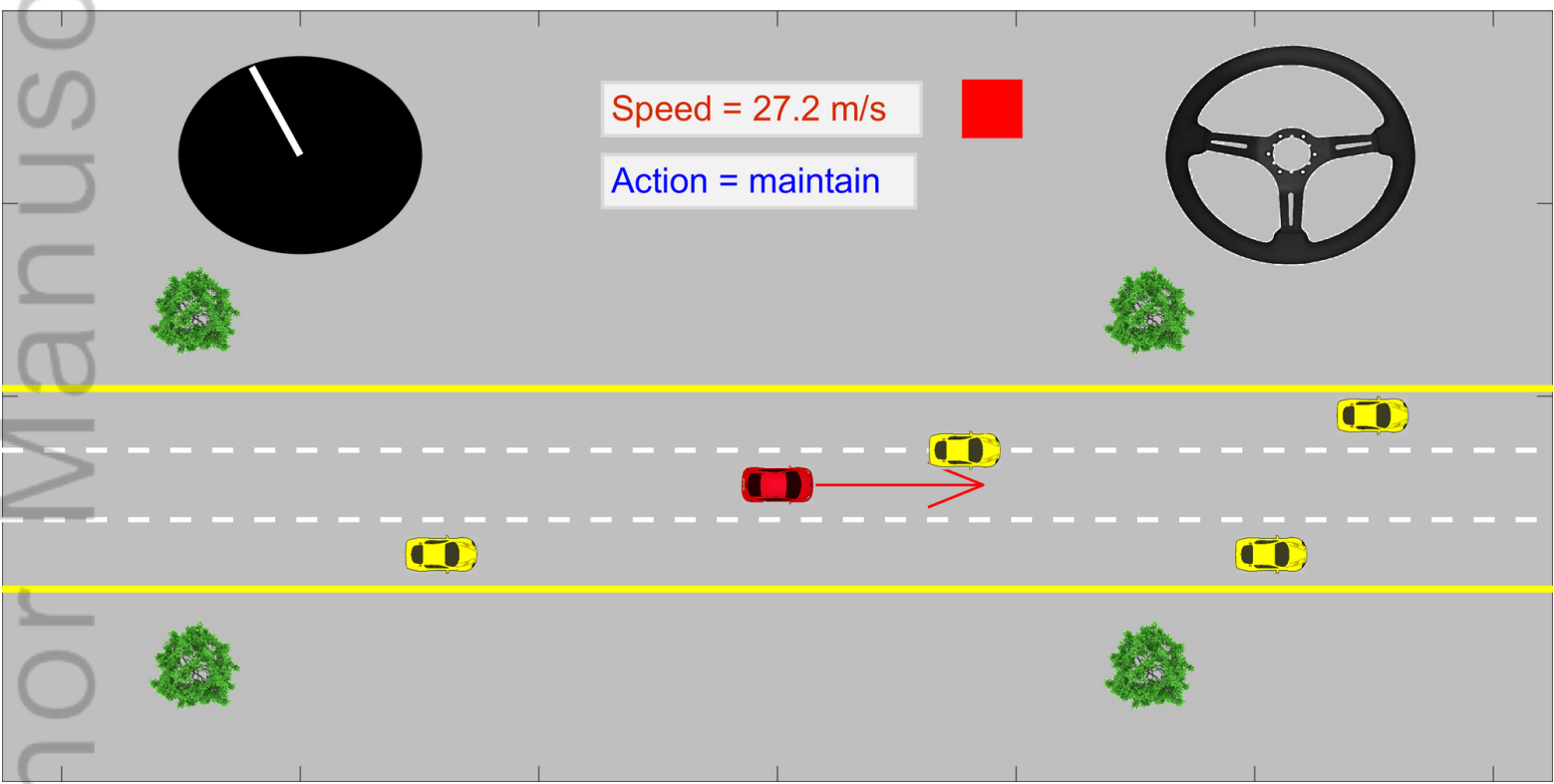
Speed = 27.2 m/s



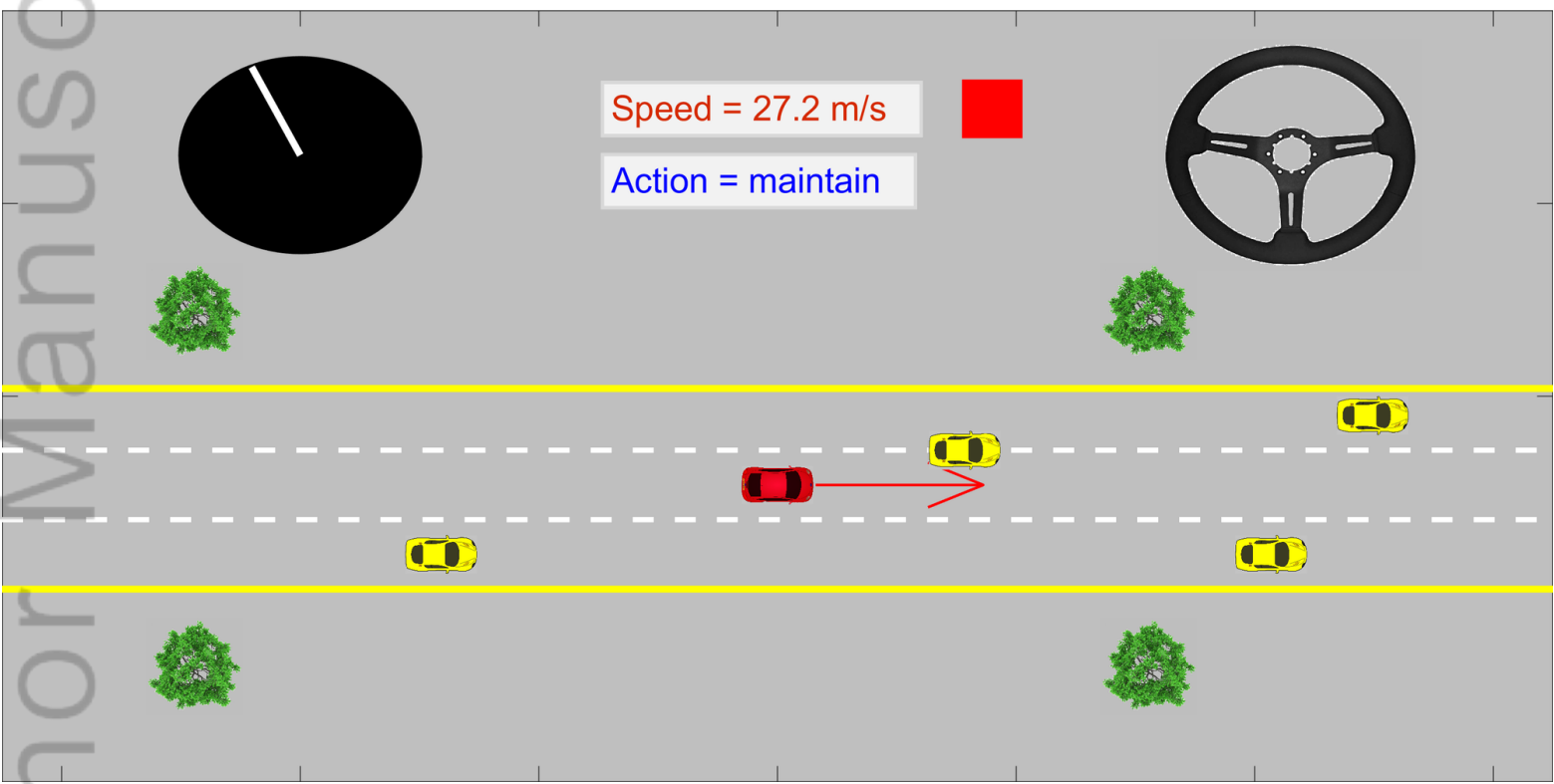
Action = hard accelerate



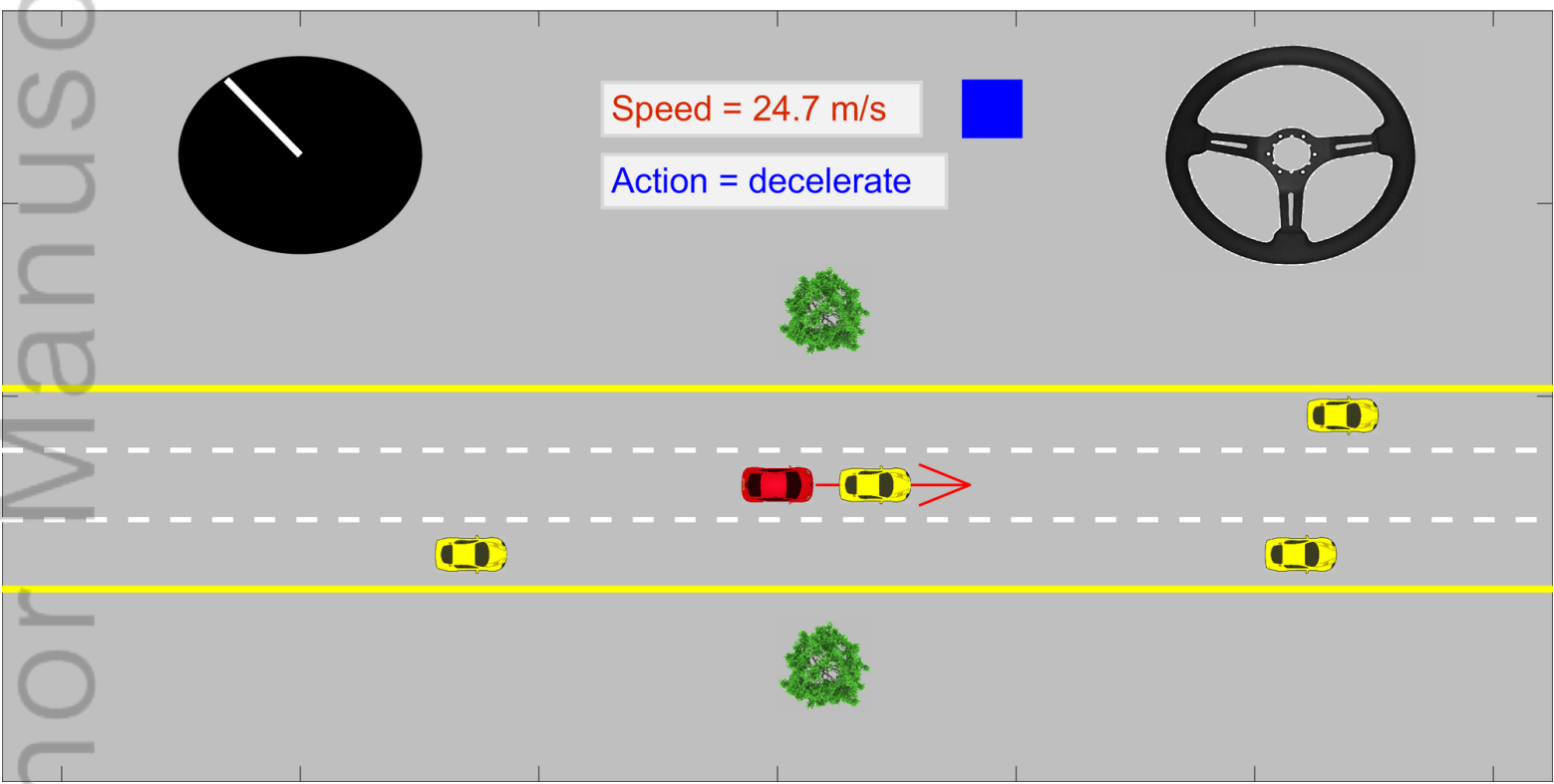
no_col_3lane_169.png



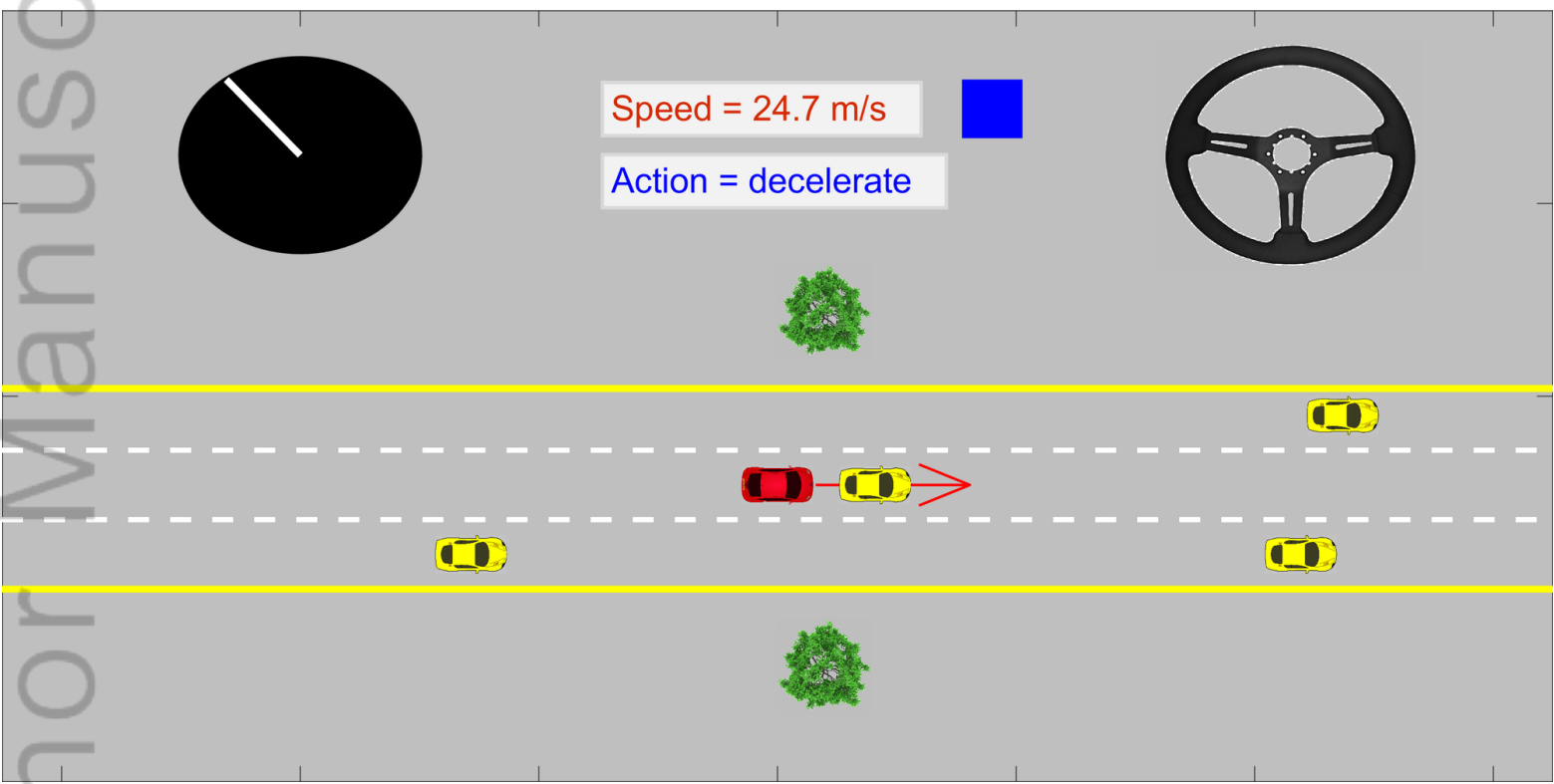
no_col_3lane_170.png



no_col_3lane_170.png



no_col_3lane_171.png



no_col_3lane_171.png