This document demonstrates the pre-exam tutorial that all candidates will view on their examination day for the SOA's Predictive Analytics Exam. This tutorial and the instructions it provides will be available at any time during the actual exam. This document may not be brought into the exam room. It is provided here only as a preview of your examination day experience.
Welcome to the SOA Predictive Analytics Exam

This exam contains 1 question.

You will have 5 hours and 15 minutes (315 minutes) total test time to complete and submit your work. The SOA has allocated 15 minutes of this total test time for breaks. When you take any break time, your exam timer will continue to count down. It is your choice when to break, how often to break, and for how long.

It is not possible to complete an extensive analysis of the data as well as produce a report in this time so we suggest using your judgement and be selective about what analyses you do complete (and justify those choices/limitations in the report). A suggested use of time is to spend about half your time performing the analysis in R and the rest of the time writing the report although it is up to you how you ultimately decide to spend the time.

Please note if you requested and were granted specific timing adjustments when scheduling this exam, the above exam time will be adjusted to support your request.

Click on the "Next" button to continue
Navigating

Tutorial Navigation

Click the "Next" button displayed at the bottom of the screen to move to the next page. Click the "Back" button to move to the previous page. You may also click the "breadcrumbs" to navigate between items.

Exam Navigation

This exam contains 1 question. Therefore, the "Next" and "Back" buttons are disabled.

Navigation between Exam and Tutorial

Once the exam has started, you can access this tutorial by clicking the '?' icon at the bottom of the screen. The exam timer will continue to count down.

To get back to the exam from the tutorial, click the "Continue the Test" button.

Click on the "Next" button to continue.
Scrolling

Using the Scroll Function

When information does not fit on a single screen, the below warning will appear at the bottom-right of the screen, near the scroll bar.

To scroll through the screen contents, you may either click and drag the scroll bar as necessary, click on the scroll down or scroll up arrows to move down and up the page a little at a time, or use the scroll wheel on the mouse.

Click on the "Next" button to continue
Time and Timer Alerts

Time Remaining
The amount of time remaining is displayed at the top of the screen.

Clicking on the timer will switch between the amount of time remaining in the current section of the exam and the amount of overall time remaining for the full exam appointment. Since there is only one section, the times shown will be the same.
Time and Timer Alerts - Pt 2 (content spread across 2 slides)

Timer Alerts

An alert box will appear to signal when **60 minutes**, **30 minutes**, and **10 minutes** remain in the examination.

Your alert message will display around the timer window if you do not have any applications open covering the exam window.

![Timer Alerts](image)

However, if you have an application open and over the exam window, an alert will be presented center, at the top of the screen as seen below. This alert window will be in front of all open windows locking the desktop screen until the alert is dismissed.

![Timer Alerts](image)

Dismiss the alert by clicking the 'X' in the lower right corner of the message box.

**Click on the "Next" button to continue**
PDF Viewer - Pt 1 (content spread across 2 slides)

PDF Viewer

Using the PDF Viewer

Aside from your project statement, you are not permitted to use any printed reference materials during this examination. Electronic reference materials are provided and viewable via the PDF Viewer.

By default the PDF Viewer will open when the item is loaded. The contents of the project statement will be displayed in the viewer to the left of the item content. During the exam if you choose to view any reference materials they will also be displayed in this space.
Navigating through the PDF Viewer

You can use the mouse to navigate through the PDF document.

To view thumbnails of each PDF page, click on the "Thumbnail" tab and select a page to view or use the table of contents view to see the outline of the document.

Other Functions of the PDF Viewer

Pan - Click and drag to pan around the document.

Zoom In/Out - Click to zoom in and out of the document. Other predefined options available in the drop-down list are: Automatic Zoom, Actual Size, Fit Page, Full Width and various percentages.

Highlight - Select text, then click the highlighter icon

Switch documents - Click the items list to see a list of available PDFs, then select to change PDFs.

Click on the "Next" button to continue
Word, Excel, and RStudio

During this examination you will be working with **Microsoft Word 2016**, **Microsoft Excel 2016**, and **RStudio**. You can access each program by clicking on the associated files located in your workspace folder.

Once opened, the file windows can be moved around the screen as required. Standard window controls, such as maximize, minimize, and close will work as expected. You will be able to use the taskbar to switch between programs. Clicking on the taskbar may not always bring the window to the front. The window on top may need to be minimized first.

Candidates writing their report in French can change Word’s language setting. Do this via the 'Review' tab. Select 'Language' and then 'Set Proofing Language'. From the list select 'French (Canada)' and then check the box to make it the default.

Please note that some features such as Help may not be available during the examination. Also, some hotkeys may not work for security issues. A list of the blocked keys and key combinations are listed on the **Testing Workstation** tutorial page.

**Click on the "Next" button to continue**
Testing Workstation

General Usability

- Workstation is locked down for security purposes
- Each user has limited access
- Use a single click to open files and folders with the mouse
- There are access restrictions and keyboard restrictions which are listed below

Access Restrictions

- Cannot type in the file explorer window to navigate within the file system
- Clicking on restricted folders or files will pop up a restriction message
- Programs are limited to what is needed to complete your examination
- Most help features are disabled, however help on R packages through the ? command in RStudio is available
- Internet access is restricted
### Keyboard Restrictions

The following keys and key combinations are restricted:

<table>
<thead>
<tr>
<th>Keyboard Combination</th>
<th>Equivalent Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALT - F4 Down</td>
<td>CTRL - P Up</td>
</tr>
<tr>
<td>ALT - F4 Up</td>
<td>CTRL - ESC Down</td>
</tr>
<tr>
<td>ALT - Space Down</td>
<td>CTRL - ESC Up</td>
</tr>
<tr>
<td>ALT - Space Up</td>
<td>CTRL - ALT - DEL</td>
</tr>
<tr>
<td>ALT - ESC Down</td>
<td>CTRL - ESC</td>
</tr>
<tr>
<td>ALT - ESC Up</td>
<td>CTRL - N</td>
</tr>
<tr>
<td>ALT - Tab Down</td>
<td>CTRL - SHIFT - N</td>
</tr>
<tr>
<td>ALT - Tab Up</td>
<td>F1</td>
</tr>
<tr>
<td>ALT - ESC</td>
<td>F1 - Down</td>
</tr>
<tr>
<td>ALT - F4</td>
<td>F1 - Up</td>
</tr>
<tr>
<td>ALT - Space</td>
<td>F11 - Down</td>
</tr>
<tr>
<td>ALT - TAB</td>
<td>F11 - Up</td>
</tr>
<tr>
<td>Application Down</td>
<td></td>
</tr>
<tr>
<td>Application Up</td>
<td></td>
</tr>
<tr>
<td>CTRL - B Down</td>
<td>Left WIN - Down</td>
</tr>
<tr>
<td>CTRL - B Up</td>
<td>Left WIN - Up</td>
</tr>
<tr>
<td>CTRL - L Down</td>
<td>Right WIN - Down</td>
</tr>
<tr>
<td>CTRL - L Up</td>
<td>Right WIN - Up</td>
</tr>
<tr>
<td>CTRL - N Down</td>
<td>Shift - F10 - Down</td>
</tr>
<tr>
<td>CTRL - N Up</td>
<td>Shift - F10 - Up</td>
</tr>
<tr>
<td>CTRL - O Down</td>
<td>Shift - F10</td>
</tr>
<tr>
<td>CTRL - O Up</td>
<td>Windows keys (both)</td>
</tr>
<tr>
<td>CTRL - P Down</td>
<td></td>
</tr>
</tbody>
</table>

Click on the "Next" button to continue.
Working with Files

In order to complete this examination successfully, you will need to access and upload multiple files. At the start of the exam the assignment files have been automatically downloaded to your workspace folder.

Your Workspace

You have been given a workspace folder. Your workspace folder can be accessed throughout the examination by clicking the folder icon on the taskbar. The file path to your workspace folder is C:\SOA.

Backup copies of original files

If for some reason you need to download an original copy of a document, we have provided a mechanism to do so. In the examination you will select the corresponding button (circled in blue below).
After selecting a button, a new file will open and be placed in your workspace folder. If there is already a file in your workspace with the same name, the NEW downloaded file will have an '_' and a number appended as seen in the example below. In this example the button was pressed twice to demonstrate the file naming logic.

<table>
<thead>
<tr>
<th>File Name</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Project Report Template.docx</td>
<td>10/18/2018</td>
<td>8:57 AM</td>
<td>Microsoft Word D...</td>
<td>15 KB</td>
</tr>
<tr>
<td>Sample Project Report Template_1.docx</td>
<td>10/18/2018</td>
<td>8:58 AM</td>
<td>Microsoft Word D...</td>
<td>15 KB</td>
</tr>
<tr>
<td>Sample Project Report Template_2.docx</td>
<td>10/18/2018</td>
<td>9:06 AM</td>
<td>Microsoft Word D...</td>
<td>15 KB</td>
</tr>
</tbody>
</table>

**Saving Files**

While you are working, make sure you save your files from time to time. Any time you save, create, or make a copy of a file, make sure the file location is to the workspace folder ONLY. Your workspace folder is located at C:\SOA.

**Naming Files**

- Do not transmit any information, either through filenames or contents of those files, that could be used to reveal your identity.
- A file name can only contain the following characters: A-Z, 0-9, hyphen( - ), underscore( _ ), space ( )

**Click on the "Next" button to continue**
Submitting Your Files for Grading - Pt 1
(content spread across 2 slides)

Submitting Your Files for Grading

Uploading Files

When you have finished the work for the examination, you will need to upload your files in order to submit them. This must be done before time expires. Click on "Attach File" to open a dialog box and select the appropriate file.

- You can only attach one file at a time.
- You are restricted to specified file types, size, and number of files that can be submitted.
- File restrictions for your test will be listed in the examination item.

![Image of file upload dialog box]

Reference Materials

Below are two PDFs containing reference material. Selecting one will display:

- ...
Submitting Your Files for Grading - Pt 2

(content spread across 2 slides)

**Options for Attached Files**

After you upload a file, it appears on the screen. Below is an example of what you will see on the screen. In this example, three files were uploaded.

<table>
<thead>
<tr>
<th>File Name</th>
<th>Date Uploaded</th>
<th>File Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>MyReport.docx</td>
<td>18/10/2018</td>
<td>15KB</td>
</tr>
<tr>
<td>MyCode.Rmd</td>
<td>18/10/2018</td>
<td>439B</td>
</tr>
<tr>
<td>MySupportingWork.csv</td>
<td>18/10/2018</td>
<td>19KB</td>
</tr>
</tbody>
</table>

Respectively, the three controls next to the 'File Size' column allow you to **rename**, **download**, and **remove** the file.

- The **rename** button allows you to change the filename after you upload. Doing this only changes the name of the file being submitted. It does NOT change the name of the file in your workspace.
- The **download** button will create a copy of your file in your workspace folder and open the file for you to view. If a file with the same name exists in your workspace folder, it will append a "_1". If a file with the name filename_1 exists, then it would name it rename the file to filename_2, etc.... This ensures, by downloading, you will never overwrite an existing file.
- The **delete** button removes the file from the list of files to be submitted for grading. It will not delete the file from your workspace.

*Please note, if you make edits to a file you uploaded, your changes will not be included. You will need to remove the original file by clicking the 'X', then reattach the file containing the edits.*

**Click on the "Next" button to continue**
Finishing your Examination

Finishing the exam section

After you have attached your files for grading and are ready to end the exam, click the 'Finish Test' button.

Note the "Finish Test" button at the top of the screen and in the Image below.

Clicking the 'Finish Test' button will bring up confirmation screens.

If you select Finish, your answers will be submitted and you will not be able to return to the exam.

You can either select "Cancel" and return to the examination or click "Finish" which will end the exam section. Only the attached files will be uploaded and scored, so make sure you attach all of your deliverables before confirming.

Once you confirm you are finished, you cannot go back!
Finishing the exam session

After the exam section is completed, you will be presented with a finish page which contains useful information regarding your exam results.

You will have one minute to read this. You can either wait for the timer to expire or click the "Finish Test" button to end your testing session.

Once the testing session has ended, the workstation will reboot.

Click on the "Next" button to continue
Tutorial Conclusion

This concludes the tutorial. You can review the tutorial by clicking on the "Back" button to back up one screen at a time, or by using the numbered buttons displayed on the left side of the screen. You may view the tutorial at any point during an active examination by clicking on the question mark icon. This icon can be found in the bottom-left of the screen once you have begun testing.

Good luck with the examination!

Click on the "Start the Test" button to exit the tutorial and begin the examination.