Executive Summary

An executive summary (ES) should precede your report. This is usually a short overview of the underlying report designed for a higher level executive who typically has very little time to spend on details. Therefore, the contents of the ES should be short and to the point.

Because an ES is a summary, only information already contained in the report should be discussed here. This is no place for new or additional material not already found in the body of your report. Typically an ES focuses on the major findings, conclusions or recommendations contained in a report with some high level justification. It is not necessary to reference any sources in an ES. It is assumed that any applicable sources are already mentioned where appropriate in the report body and “List of References” at the end of the report.

Last but not least, an ES is often copied and distributed with a copy of the title page. Therefore, ES pages should be numbered separately from the main report starting at page number 1.

The heading for an executive summary is typically unnumbered, centered or left-justified in a bold, and slightly larger (Times New Roman 14) font than the text (Times New Roman 12). Subheadings are sometimes used in an ES but only for longer summaries of say 5 or more pages.
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[The heading for a Table of Contents (TOC) is typically unnumbered, centered or left-justified in a bold and slightly larger (Times New Roman 14) font than the main text (Times New Roman 12). I find it best to use new lines only between first level headings. Subheading entries are single spaced – otherwise the table of contents takes up too many pages. Keep the number of levels low (maybe 1st, 2nd and 3rd level headings only). Otherwise, the Table of Contents becomes long and overly detailed. Style for the TOC is up to you but I find use of leaders (...) and bolding of first level headings to be helpful to the reader. Usually the table of contents does not include entries for any material that precedes it (e.g., title page, ES). Note that number style is different. The use of roman numbers (1, 2, 3, etc.) does not usually start until the body of your report.]
List of Acronyms

ES   Executive Summary
FCC  Federal Communications Commission
HP   Hewlett Packard
LOA  List of Acronyms
WAN  Wide Area Network

[This single page should contain an alphabetical list of any acronyms used in your report. In the body of your report, the first use of an acronym should be preceded by the full text represented by the acronym and 2) followed by enough information for the reader to understand the concept behind the acronym. This list is placed in long documents to help the reader when they run across an acronym many pages after it is first defined. The reader can look at this list and see what the acronym stands for without searching for its definition within the body of the report. Often this list contains unusual abbreviations as well as acronyms. A List of Acronyms (LOA) can be double spaced but should not take more than a page. If too long, reformat the lines with 1.5 or 1.0 spacing. The heading for a List of Acronyms is typically unnumbered, centered or left-justified in a bold and slightly larger (Times New Roman 14) font than the main text (Times New Roman 12).]
List of Figures

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[This single page should contain a list of all figures within your report in numerical order. Each figure should have an associated caption with a unique number starting at 1 and a short caption/title describing the graphic. Do not place the actual figures on this page. Instead, use this page as a kind of “table of contents” to where each figure can be found in the body of your report. A list of figures (like a LOA) is designed to help the reader find a figure if it is mentioned in a long document many pages after the figure itself. The reader can look at this list and see which page contains the figure referenced in the report narrative and go to that page to find it. Remember that figures are usually placed on the same page as the first mention of the figure in the report text (or as close to that page as possible). For your report, the list of figures can be double spaced but should not take more than a page or two. If too long, reformat the lines with 1.5 or 1.0 spacing. Of course if you have that many pictures we have another problem! The heading for a List of Acronyms is typically unnumbered, centered or left-justified in a bold and slightly larger (Times New Roman 14) font than the main text (Times New Roman 12).]
1 Introduction

The Introduction section begins the body of a report. This section is used to “introduce” the reader to the topic being covered in the report but is not a summary like the ES. Often the Introduction will be used to lay out the scope of a report or project in broad terms. Basically you should use this space to set the overall context for your report so the reader knows what you will be covering.

An Introduction can contain descriptions of what is to come in subsequent sections. For purposes of this course, you can also use the Introduction to discuss a bit about the motivation for your research, interest in the topic or the organization of the work among team members.

The length of the introduction is usually very short (two or three pages) depending on the size of the report.
2 Background Section(s)

Between your Introduction and Conclusions is the bulk of any report or research paper. Here is where all of the detail goes. Generally you will start with a section that describes the background for the subject you are researching. Many folks just call this the “Background” section but the exact title can vary depending on your project. Some of the questions that can be answered in one or more background sections include:

- What work has been done by other researchers that relates to your efforts?
- What previous work by you or others has been used as a starting point for the information contained in this report?
- What is the historical context in which a technology is being discussed.
- What is the current business environment like?

The goal of any background sections is to get the reader “up to speed” before you dive into the details of your project or research. These sections provide the historical and current context for the report.
3 Other Sections

You will include other sections for your report as required. These may be technology specific or related to business issues. These sections are important since they create the overall structure to the information you will present in narrative form.
4 Format Guidelines

Everyone has his/her own preference regarding the style used to format a report. It is helpful to tailor the style to suit your audience. I have found that the simple format discussed in this section works well in a general, no-frills business setting and can serve as a starting point for more fancy formats. For your project you are not required to use this format but the following minimum requirements must be met:

- Use Times New Roman Font, size 10 or 12 for report text
- Use a bolded font of size 12 or 14, but no larger for your headings. Some authors prefer to use a different font in their headings than the font used for the body text font for their headings. If you do this a good choice is Arial Bold.
- New paragraphs should begin with a standard .5” indentation
- No new lines between paragraphs unless you are using single spacing.
- Line spacing should be 1.5 or 2 (double).
- Body text should be full justified, no ragged right edges.
- Use a standard 1” margin for top, bottom, left and right sides of pages
- Bullet points should be indented no more than .5” from the left margin with text left justified .25” from the bullets themselves.

4.1 Headings

Material within your report should be organized using various headings. All Page, Section, and Subsection headings should be numbered and use a BOLD face type. Please refrain from using underlining in headings. Each major section can begin on new page. Subsections should continue on the same page separated by one new line feed. Beneath
each 1st level heading, please indicate the primary source used for the material. If subheadings use different primary sources, indicate that immediately below the subheading. Headings should be left justified and follow the numbering convention below:

1  First Level Heading (heading)
1.1  Second Level Heading (subheading)
1.1.1  Third Level Heading (subsubheading)
1.1.2  Another Third Level Heading
1.2  Next Second Level Heading
2  Next First Level Heading

At times it may be helpful to go to even a fourth level heading. If that happens you may want to consider reorganizing a section into two smaller sections (2 first level headers). Do no use any headers beyond level 4.

4.2  Figures & Tables

Figures and tables are usually placed in your report centered between the margins. Text within a table or within the figure/text caption is usually single spaced. Caption fonts are typically smaller than the font used for narrative text (e.g., 9 or 10 pt). Tables and figures are both numbered consecutively starting at “1”. Table captions are placed above the table. Figure captions are placed below the figure. All figures should be listed in the List of Figures in numerical order. Optionally you can add a List of Tables if you wish. Below are examples of how figure and table captions are used:
Table 1: Highest (best) and Lowest (worst) results of all experiments performed using three different multiple population genetic algorithms.

<table>
<thead>
<tr>
<th></th>
<th>Multiple Run (no swap)</th>
<th>Multiple Pop. (Ring)</th>
<th>Multiple Pop. (Network)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>122,392</td>
<td>243</td>
<td>126</td>
</tr>
<tr>
<td>Highest</td>
<td>45,941,294</td>
<td>115,054</td>
<td>1,033</td>
</tr>
</tbody>
</table>

Figure 1: Graph of raw fitness distributions for values from 0 to 10

Note that the distance between the figure and the caption is small. Do not double space the caption.
5 Conclusions

This should be the last section of your report. The actual number assigned to this section will depend on the amount of material in your report. For those of you contrasting two different technologies, you might want to compare the advantages and disadvantages here. In a business environment you might use this space to make final recommendations or state final opinions about the reports analysis.

For purposes of this project I would like you to include your opinions of what you have learned and if you feel it will help you in the future. This is in addition to any conclusions you may draw from the research you have performed.
List of References

[This page begins a list of references to source material cited in the body of your report. For your project, I recommend that references use APA style. The number of references can be quite large (30+) for detailed works like the reports you are preparing. To save space, references are therefore single spaced and often in a font smaller than the body of the report (e.g., Time New Roman 9 or 10). References in APA style should be sorted in alphabetical order by the last name of the first/primary author. Multiple works by the same author are further sorted by date of publication. The heading for a List of References is typically unnumbered, centered or left-justified in a bold and slightly larger (Times New Roman 14) font than the main text (Times New Roman 12).]

For help with APA style references see http://www.lib.duke.edu/libguide/citing.htm
[Often you will need to include support material with your project that just doesn’t fit in well with your report narrative (e.g., copies of programming source code, large tables/graphs, and copies of legal documents). These materials can be included with your report as Appendices (sometimes referred to as Attachments.) The number of appendices will vary based on the report or project but each appendix should be included in the Table of Contents.]