

Quantitative Risk Analysis (Part A)

Rafael Appe, Kristin Dexter, Ricardo Marrero, Katy Sorrells, Scott Speaks, Benjamin Srock

Embry-Riddle Aeronautical University Worldwide Campus

Assessing and Managing Project Risk

PMGT 613

Archie Addo, Ph.D.

## Table of Contents

|                       |   |
|-----------------------|---|
| List of Tables .....  | 3 |
| List of Figures ..... | 4 |
| Part A .....          | 5 |
| Input Table .....     | 5 |
| Resulting Table ..... | 6 |
| Gantt chart.....      | 7 |

**List of Tables**

Table 1 - Input Table..... 5

Table 2 -Resulting Table..... 6

**List of Figures**

Figure 1 - Gantt Chart ..... 7

**Part A**

The Project Management Office for your company would like to see the critical path for your major milestones, as well as the earliest-latest starting and finishing times. Based on the project plan developed earlier in the project, the milestones, dependencies, and effort times are as follows:

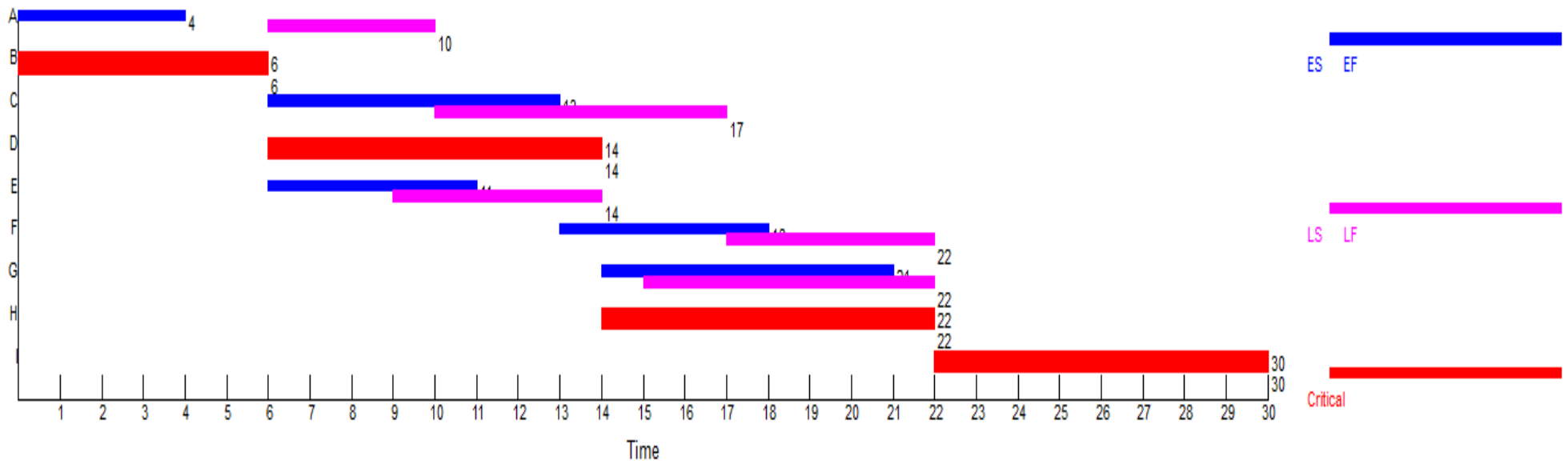
| Milestone | Predecessor | Effort (weeks) |
|-----------|-------------|----------------|
| A         |             | 4              |
| B         |             | 6              |
| C         | A,B         | 7              |
| D         | B           | 8              |
| E         | B           | 5              |
| F         | C           | 5              |
| G         | D           | 7              |
| H         | D,E         | 8              |
| I         | F,G,H       | 4              |

**Input Table***Table 1 - Input Table*

| Activity | Time | Pred 1 | Pred 2 | Pred 3 |
|----------|------|--------|--------|--------|
| A        | 4    |        |        |        |
| B        | 6    |        |        |        |
| C        | 7    | A      | B      |        |
| D        | 8    | B      |        |        |
| E        | 5    | B      |        |        |
| F        | 5    | C      |        |        |
| G        | 7    | D      |        |        |
| H        | 8    | D      | E      |        |
| I        | 4    | F      | G      | H      |

**Resulting Table***Table 2 -Resulting Table*

| Activity       | Early Start | Early Finish | Late Start | Late Finish | Slack |
|----------------|-------------|--------------|------------|-------------|-------|
| A              | 0           | 4            | 6          | 10          | 6     |
| B              | 0           | 6            | 0          | 6           | 0     |
| C              | 6           | 13           | 10         | 17          | 4     |
| D              | 6           | 14           | 6          | 14          | 0     |
| E              | 6           | 11           | 9          | 14          | 3     |
| F              | 13          | 18           | 17         | 22          | 4     |
| G              | 14          | 21           | 15         | 22          | 1     |
| H              | 14          | 22           | 14         | 22          | 0     |
| I              | 22          | 26           | 22         | 26          | 0     |
| <b>Project</b> |             | <b>26</b>    |            |             |       |

**Gantt chart***Figure 1 - Gantt Chart*