

SDLC

An introduction to the Software Development Lifecycle.

Task 2 SDLC

| Question | Answer |
|---------------------------------------------------|--------|
| How many phases can an SDLC have? (Format X-Y) | 6-8 |

Task 3 SDLC Phases Part 1

| Question | Answer |
|-------------------------------------------------------------------|-------------------------|
| What phase focuses on determining the first idea for a prototype? | Requirements Definition |
| What stage is also known as the "Feasibility Stage"? | Planning Stage |
| When do you outline the user interfaces and network requirements? | Design and Prototyping |

Task 4 SDLC Phases Part 2

| Question | Answer |
|------------------------------------------------------------------------------------|----------------------------|
| What phase focuses on handling issues or bugs reported by end-users? | Operations and Maintenance |
| What phase involves releasing new versions of software? | Deployment |
| What phase ensures software meets the standards defined in the requirements phase? | Testing |

Task 5 Keep CALMS

| Question | Answer |
|----------------------------|-------------------------------------------------|
| What does CALMS stand for? | Culture, Automation, Lean, Measurement, Sharing |

Task 6 DevOps Metrics


| Question | Answer |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------|
| What 2 metrics are used to measure deployment agility? | deployment speed and frequency |
| What is an essential rate for engineers in Production environments to know if code meets security requirements? | Failure Rate |
| What is the measurement for recovery time after a failure? | MTTR |

Task 7 Production of the Droids

What is the flag that you receive once you have doubled the empire's investment?


Answer: **THM{Ruler.of.the.SDLC.Droids}**

- The idea of this game is in reducing the number of developers and increasing the number of sprints will increase the empire's investment for doubling the empire's investment
- The empire has provided an initial seed funding of \$1,000,000 and expects a return of double the investment, i.e., \$2,000,000 or higher. The strategy to achieve this involves:
 - Reducing Developers: This aligns with Brooks's law, suggesting that fewer developers can lead to a more streamlined and efficient process, avoiding delays caused by the complexities of managing a larger team.
 - Increasing Sprints: More sprints allow for iterative development, continuous improvement, and quicker feedback loops, leading to higher productivity and better quality outcomes.




SDLC Factory Game


Select amount of sprints and developers.

 **Total Budget:**

\$1,000,000

 **Cost of developer per sprint :**

\$3,000

 **Number of developers :**

-10

-5


-1

2

+1

+5

+10

 **Number of sprints :**

-10

-5


-1

100

+1

+5


+10

 **Budget Remaining :**

\$400,000

Next

SDLC Factory Game



SDLC Factory Game

Allocate number of sprints

[< Home](#)

Remaining Sprints : 93



Planning

-10

-5

-1

1

+1

+5

+10



Define Requirements

-10

-5

-1

1

+1

+5

+10



Design and Prototyping

-10

-5

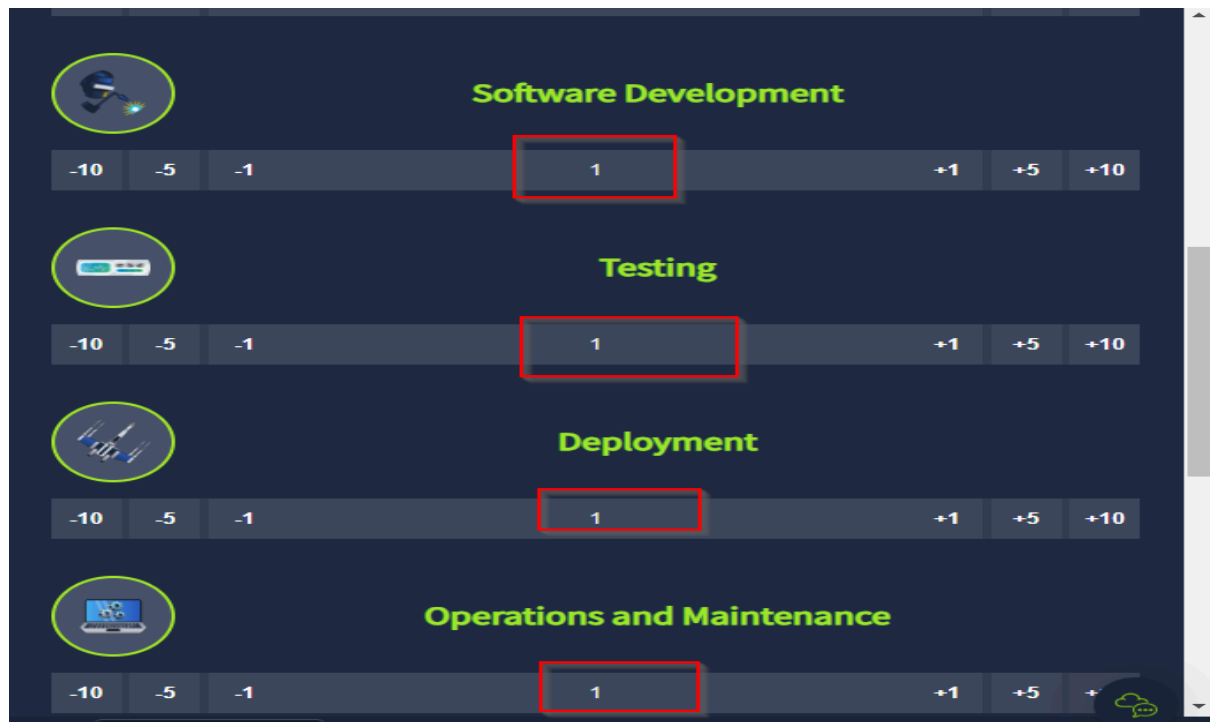
-1

1

+1

+5

+10



→ Then i clicked on start game

| Game Metrics | Lower Limit | Upper Limit |
|--------------------------------|-------------|-------------|
| Rate of new bugs | 0% | 5% |
| Cost to fix bugs | \$213 | \$1000 |
| Droid production rate | 100 | 129 |
| Percentage of defective droids | 0% | 5% |
| Droid production cost | \$10000 | \$11600 |
| Droid upsell percentage | 20% | 38% |
| Droid sell cost | \$12000 | \$16008 |

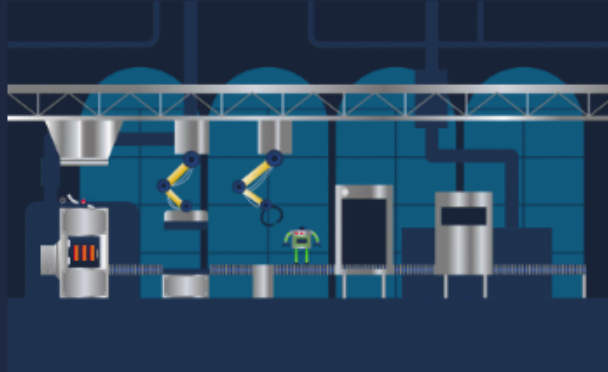
Start Game

→ Then i clicked on "Next Month" tab up until december project run and checked the result



SDLC Factory Game

Factory production line.



| Project Run | Funds at start of month | Money Out | Money In | Droid Produced | Defective Percentage | Defective Count |
|-------------|-------------------------|--------------|--------------|----------------|----------------------|-----------------|
| January | \$400000.00 | \$1104077.35 | \$1506133.34 | 112 | 3.23% | 2 |

Next month

| Project Run | Funds at start of month | Money Out | Money In | Droid Produced | Defective Percentage | Defective Count |
|-------------|-------------------------|--------------|--------------|----------------|----------------------|-----------------|
| January | \$400000.00 | \$1104077.35 | \$1506133.34 | 112 | 3.23% | 2 |
| February | \$802055.99 | \$1345414.32 | \$1592829.45 | 111 | 3.58% | 2 |
| March | \$1049471.11 | \$1424448.44 | \$1648208.03 | 124 | 3.96% | 5 |
| April | \$1273230.69 | \$1190572.30 | \$1765940.46 | 108 | 3.05% | 3 |
| May | \$1848598.85 | \$1293279.52 | \$1501564.63 | 125 | 3.14% | 5 |
| June | \$2056883.96 | \$1075900.18 | \$1517473.28 | 121 | 0.94% | 1 |
| July | \$2498457.06 | \$1239417.39 | \$1641850.98 | 126 | 3.03% | 2 |
| August | \$2900890.65 | \$1227356.31 | \$1495072.58 | 126 | 3.43% | 5 |
| September | \$3168606.92 | \$1286876.07 | \$1593185.06 | 130 | 0.07% | 5 |
| October | \$3474915.91 | \$1391804.61 | \$1634641.47 | 129 | 3.55% | 3 |
| November | \$3717752.77 | \$1225210.47 | \$1676657.53 | 108 | 1.22% | 4 |
| December | \$4169199.83 | \$1148890.33 | \$1470474.71 | 125 | 1.65% | 2 |

→ Finally, i got the flag

The screenshot displays the 'SDLC Factory Game' interface. At the top left is the 'Try Hack Me' logo. The main title 'SDLC Factory Game' is centered at the top, with the subtitle 'Factory annually revenue' below it. A 'Flag:' section is highlighted with a red box, containing the text 'THM{Ruler.of.the.SDLC.Droids}'. Below this is a 'Certificate of Participation' for the 'SDLC FACTORY GAME'. The certificate states: 'You have successfully completed the challange of SDLC Factory Game'. It includes a table with the following data:

| | |
|--------------------|----------------|
| Final | \$4,490,784.21 |
| Initial Investment | \$1,000,000 |
| Total Money Made | \$3,490,784.21 |

The certificate also shows a timestamp: '11:28 PM, 06/10/2024'. At the bottom, there is a navigation bar with a button labeled 'SDLC Factory Game'.

END!!!