



EAST WEST UNIVERSITY

Department of Computer Science and Engineering
East West University
Dhaka, Bangladesh

Summer 2024
Course Code: CSE495
Section: 03
Submitted to:
Deepak Chandra Ray

Topic: Cyber Security Consultancy Startup

Group Members

| NAME | ID |
|----------------------|---------------|
| Iffat Tasnim | 2020-2-60-004 |
| Nurzahan Akter Munni | 2020-2-60-176 |
| Nadia Sultana | 2020-2-60-024 |

Project Charter:

| | | |
|---|---|---|
| PROJECT NAME | PROJECT MANAGER | PROJECT SPONSOR |
| Cyber Security Consultancy Startup | Iffat Tasnim | DR. Yunus |
| EMAIL | PHONE | ORGANIZATIONAL UNIT(S) |
| cscs@gmail.com | 01xxx-xx | Cybersecurity Consultancy, Software Solution |
| OBJECTIVES | EXPECTED START DATE | EXPECTED COMPLETION DATE |
| 1) Establish a fully operational Cyber Security Consultancy business. 2) Develop a comprehensive suite of cybersecurity services. 3) Build a strong client base within the first year. 4) Ensure compliance with industry standards and regulations. 5) Establish a solid reputation for delivering high-quality cybersecurity solutions. | 9/11/2024 | 12/31/2025 |
| INITIAL BUDGET | ESTIMATED COSTS | FINAL BUDGET |
| 1) Personal-savings: \$50,000 2) Bank loan: \$100,000 3) Angel investors: \$50,000 TOTAL BUDGET: \$200,000 | 1) Legal and accounting fees: \$40,000 2) Marketing and advertising: \$6,000 3) Website development: \$10,000 4) Equipment and software: \$60,000 5) Office rent and utilities: \$23,000 6) Salaries and benefits: \$23,000 7) Other expenses: \$10,860 | \$40,000+ \$6,000+ \$10000 +\$60000+ \$23000 +\$23000+ \$10860 = \$172,860 |
| REVISED BUDGET: \$27,140 | | |

PROJECT OVERVIEW

| | |
|-----------------------|--|
| PURPOSE OF PROJECT | The purpose of this project is to establish a Cyber Security Consultancy Startup aimed at providing cybersecurity services like vulnerability assessments, penetration testing, incident response, and security awareness training for small and medium-sized businesses (SMBs) in Bangladesh. |
| EXPECTED DELIVERABLES | Deliverable 1: Signed contracts with SMBs for cybersecurity services. Deliverable 2: Delivered cybersecurity solutions, including incident response plans and vulnerability assessments. |

PROJECT SCOPE

| | |
|-------|--|
| SCOPE | The project scope involves identifying SMBs in Bangladesh, negotiating cybersecurity service agreements, analyzing their needs, planning cybersecurity solutions, and delivering services including vulnerability assessments, penetration testing, and employee training. |
|-------|--|

KEY MILESTONES

| KEY MILESTONE | START | FINISH |
|--|-----------------|------------------|
| Core Service Offering (Risk Assessment, penetration testing) | 5/16/25 8:00 AM | 5/20/25 5:00 PM |
| Team Training | 7/10/25 8:00 AM | 7/29/25 5:00 PM |
| Client Management Tools Setup | 9/28/25 8:00 AM | 10/22/25 5:00 PM |
| Partnership Development | 11/7/25 8:00 AM | 11/26/25 5:00 PM |
| Team Growth | 12/7/25 8:00 AM | 12/26/25 5:00 PM |

RESOURCES

| PROJECT TEAM | SUPPORT RESOURCES | SPECIAL NEEDS |
|--|--|---------------|
| Iffat Tasnim - Project Manager | Project Management, Cybersecurity Services | TBA |
| Nurzahan Akter Munni - Assistant Manager | - | - |
| Nadia Sultana - Senior Engineer | - | - |

COSTS

| COST TYPE | VENDOR / LABOR NAMES | RATE | Total |
|-------------|--|--------------|---------------|
| Work | Project Manager | \$20.00/hour | \$260.00/hour |
| | Security Consultants | \$50.00/hour | |
| | Security Analysts | \$50.00/hour | |
| | Security Awareness Trainers | \$50.00/hour | |
| | Marketing and Sales Team | \$90.00/hour | |
| Material | Firewall Appliances | \$2000 | \$30400.00 |
| | Routers | \$100 | |
| | Intrusion Detection/Prevention System (IDS/IPS) Appliances | \$700 | |
| | Laptops/Desktops | \$1000 | |
| | Mobile Devices | \$400 | |
| | Hardware Security Modules (HSMs) | \$20000 | |
| | Network Monitoring Devices | \$500 | |
| | Encryption Appliances | \$5000 | |
| | Secure USB Drives | \$50 | |
| | Secure VoIP Phones | \$150 | |
| | CCTV Cameras | \$300 | |
| | UPS | \$200 | |
| TOTAL COST: | | | \$30660.00 |

STAKEHOLDERS

| ROLE | STAKEHOLDER |
|-------------------|---|
| Project manager | Iffat Tasnim |
| Development teams | Designers, developers, testers, and other team members involved in the process. |
| App owners | Various stakeholders own the apps targeted for cybersecurity services. |
| End users | SMBs benefiting from the enhanced cybersecurity measures. |

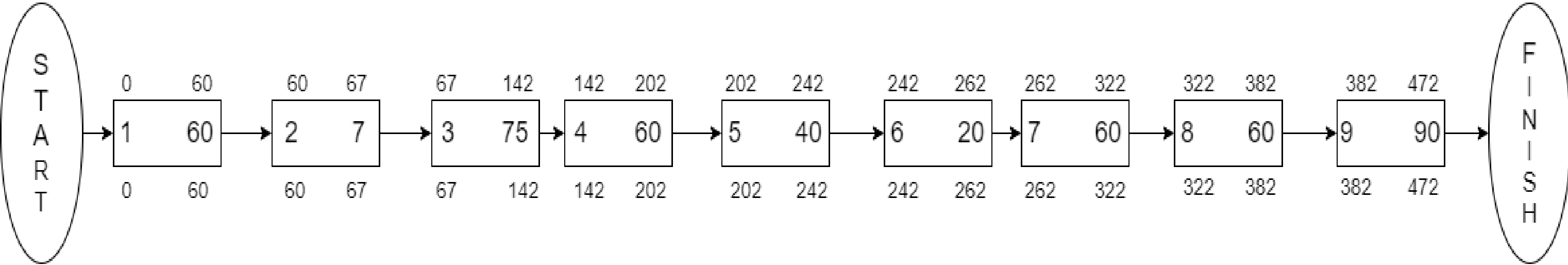
RISKS, CONSTRAINTS, AND ASSUMPTIONS

| CATEGORY | DETAILS |
|-------------|---|
| RISKS | <div>1. SMBs may prefer to develop cybersecurity solutions in-house or through other vendors.</div> <div>2. Technical issues during implementation.</div> |
| CONSTRAINTS | Programming limitations, performance bottlenecks, budget limitations, and tight deadlines for service deployment. |
| ASSUMPTIONS | <div>1. SMBs will value enhanced cybersecurity services.</div> <div>2. Sufficient market demand for cybersecurity solutions in Bangladesh.</div> |

Each major tasks with their predecessors and durations:

| Task ID | Activity | Predecessors | Duration(days) | Start | Finish |
|---------|--|--------------|----------------|------------------|------------------|
| 1 | Develop business plans and financial projections | - | 60 | 9/11/24 8:00 AM | 11/9/24 5:00 PM |
| 2 | Develop business model and strategy | 1 | 7 | 11/10/24 8:00 AM | 11/16/24 5:00 PM |
| 3 | Secure funding and resources | 2 | 75 | 11/17/24 8:00 AM | 1/30/25 5:00 PM |
| 4 | Build brand and marketing | 3 | 60 | 1/31/25 8:00 AM | 3/31/25 5:00 PM |
| 5 | Build a website and online services | 4 | 40 | 4/1/25 8:00 AM | 5/10/25 5:00 PM |
| 6 | Implementing services of pricing and offerings | 5 | 20 | 5/11/25 8:00 AM | 5/30/25 5:00 PM |
| 7 | Recruit members and team development | 6 | 60 | 5/31/25 8:00 AM | 7/29/25 5:00 PM |
| 8 | Implement a cyber security office | 7 | 60 | 7/30/25 8:00 AM | 9/27/25 5:00 PM |
| 9 | Implement operations and growth | 8 | 90 | 9/28/25 8:00 AM | 12/26/25 5:00 PM |

Network Diagram: (Diagram is drawn with the help of draw.io)



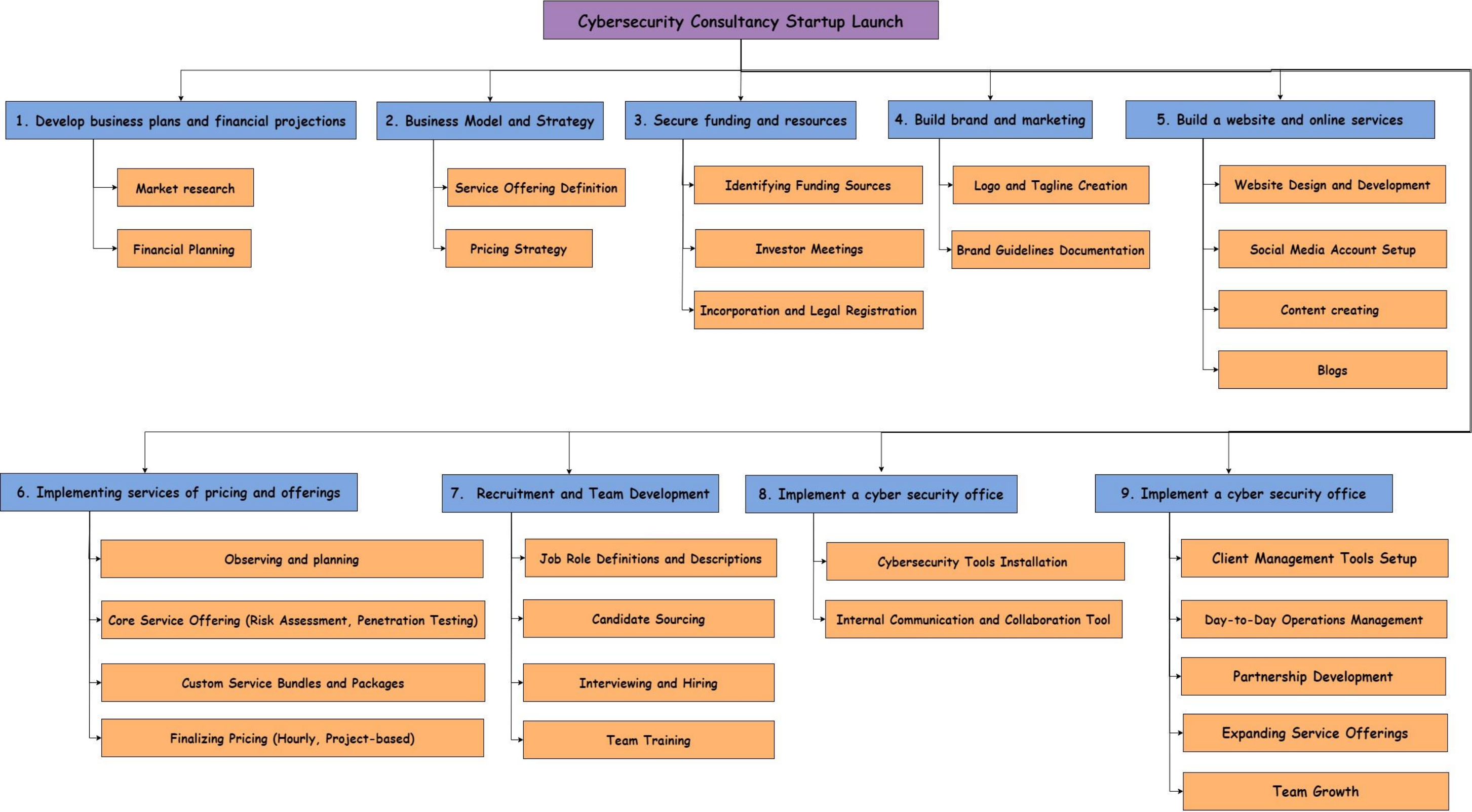
Critical path: 1 → 2 → 3 → 4 → 5 → 6 → 7 → 8 → 9

Critical time: 472 days.

The critical path our project management is the longest sequence of tasks that must be completed on time for the entire project to finish on schedule. It shows our minimum duration of our project timeline.

The Critical time refers to the total duration required to complete all tasks on the critical path in our project. It represents the shortest possible time in which a project can be finished, assuming no delays occur in the tasks that are part of the critical path.

Work Breakdown Structure: (Diagram is drawn with the help of draw.io)



After allocating and assigning all resources:

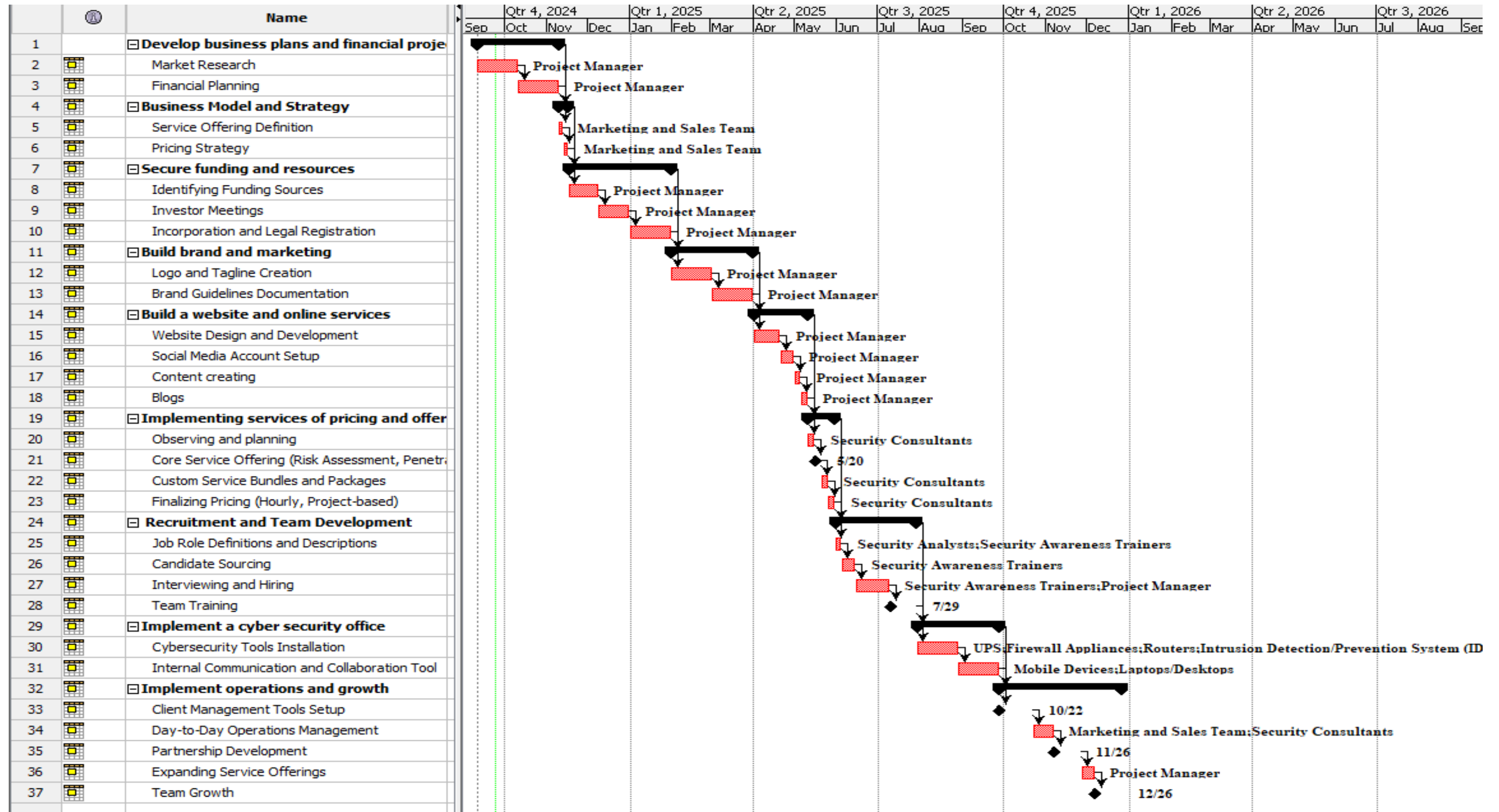
| ACTIVITY | COST | Total |
|--|---------------------------|----------|
| 1. Develop business plans and financial projections | | \$9,600 |
| Market Research | 240-hour x \$20 = \$4,800 | |
| Financial Planning | 240-hour x \$20 = \$4,800 | |
| 2. Business Model and Strategy | | \$5,040 |
| Service Offering Definition | 24-hour x \$90 = \$2,160 | |
| Pricing Strategy | 32-hour x \$90 = \$2,880 | |
| 3. Secure funding and resources | | \$11,920 |
| Identifying Funding Sources | 172-hour x \$20 = \$3,440 | |
| Investor Meetings | 184-hour x \$20 = \$3,680 | |
| Incorporation and Legal Registration | 240-hour x \$20 = \$4,800 | |
| 4. Build brand and marketing | | \$9,600 |
| Logo and Tagline Creation | 240-hour x \$20 = \$4,800 | |
| Brand Guidelines Documentation | 240-hour x \$20 = \$4,800 | |
| 5. Build a website and online services | | |
| Website Design and Development | 160-hour x \$20 = \$3,200 | \$6,400 |
| Social Media Account Setup | 80-hour x \$20 = \$1,600 | |
| Content creating | 40-hour x \$20 = \$800 | |
| Blogs | 40-hour x \$20 = \$800 | |
| 6. Implementing services of pricing and offerings | | |
| Observing and planning | 40-hour x \$50 = \$2,000 | \$8,000 |
| Core Service Offering (Risk Assessment, Penetration Testing) | 40 -hour x \$50 = \$2,000 | |
| Custom Service Bundles and Packages | 40-hour x \$50 = \$2,000 | |

| ACTIVITY | COST | Total |
|---|--|----------|
| Finalizing Pricing (Hourly, Project-based) | 40-hour x \$50 = \$2,000 | \$30,000 |
| 7. Recruitment and Team Development | | |
| Job Role Definitions and Descriptions | 40-hour x \$50+ 40-hour x \$50 = \$4,000 | |
| Candidate Sourcing | 80-hour x \$50 = \$4,000 | |
| Interviewing and Hiring | 200-hour x \$20+200-hour x \$50 = \$14,000 | |
| Team Training | 160-hour x \$50 = \$8,000 | \$31,800 |
| 8. Implement a cyber security office | | |
| Cybersecurity Tools Installation | \$2,000+ \$100+ \$700+ \$1,000+ \$400+ \$20,000+ \$500+ \$5,000+ \$50+ \$150+ \$300+ \$200 = \$30,400 | |
| Internal Communication and Collaboration Tool | \$1,000+ \$400 = \$1,400 | \$60,500 |
| 9. Implement operations and growth | | |
| Client Management Tools Setup | 200-hour x \$90 = \$18,000 | |
| Day-to-Day Operations Management | 120x \$50+ 120x \$90 = \$16,800 | |
| Partnership Development | 160x \$20 = \$3,200 | |
| Expanding Service Offerings | 80x \$20 = \$1,600 | |
| Team Growth | 37-hour x \$50+ 44-hour x \$50+ 49-hour x \$50 + 160-hour x \$90 = \$20,900 | |

TOTAL COST: \$172,860.00

From Libra:

Gantt Chart:



Resources:

[illegible]

Allocation of each resource to each task:

| | | | | | | |
|--|--|-----------------|-------------------------|-------------------------|-----------|--------------------------------|
| | <input type="checkbox"/> Develop business plans and financial proje | 60 days? | 9/11/24 8:00 AM | 11/9/24 5:00 PM | | |
| | Market Research | 30 days? | 9/11/24 8:00 AM | 10/10/24 5:00 PM | | Project Manager |
| | Financial Planning | 30 days? | 10/11/24 8:00 AM | 11/9/24 5:00 PM | 2 | Project Manager |
| | <input type="checkbox"/> Business Model and Strategy | 7 days? | 11/10/24 8:00 AM | 11/16/24 5:00 PM | 1 | |
| | Service Offering Definition | 3 days? | 11/10/24 8:00 AM | 11/12/24 5:00 PM | 3 | Marketing and Sales Team |
| | Pricing Strategy | 4 days? | 11/13/24 8:00 AM | 11/16/24 5:00 PM | 5 | Marketing and Sales Team |
| | <input type="checkbox"/> Secure funding and resources | 75 days? | 11/17/24 8:00 AM | 1/30/25 5:00 PM | 4 | |
| | Identifying Funding Sources | 22 days? | 11/17/24 8:00 AM | 12/8/24 5:00 PM | 6 | Project Manager |
| | Investor Meetings | 23 days? | 12/9/24 8:00 AM | 12/31/24 5:00 PM | 8 | Project Manager |
| | Incorporation and Legal Registration | 30 days? | 1/1/25 8:00 AM | 1/30/25 5:00 PM | 9 | Project Manager |
| | <input type="checkbox"/> Build brand and marketing | 60 days? | 1/31/25 8:00 AM | 3/31/25 5:00 PM | 7 | |
| | Logo and Tagline Creation | 30 days? | 1/31/25 8:00 AM | 3/1/25 5:00 PM | 10 | Project Manager |
| | Brand Guidelines Documentation | 30 days? | 3/2/25 8:00 AM | 3/31/25 5:00 PM | 12 | Project Manager |
| | <input type="checkbox"/> Build a website and online services | 40 days? | 4/1/25 8:00 AM | 5/10/25 5:00 PM | 11 | |
| | Website Design and Development | 20 days? | 4/1/25 8:00 AM | 4/20/25 5:00 PM | 13 | Project Manager |
| | Social Media Account Setup | 10 days? | 4/21/25 8:00 AM | 4/30/25 5:00 PM | 15 | Project Manager |
| | Content creating | 5 days? | 5/1/25 8:00 AM | 5/5/25 5:00 PM | 16 | Project Manager |
| | Blogs | 5 days? | 5/6/25 8:00 AM | 5/10/25 5:00 PM | 17 | Project Manager |
| | <input type="checkbox"/> Implementing services of pricing and offer | 20 days? | 5/11/25 8:00 AM | 5/30/25 5:00 PM | 14 | |
| | Observing and planning | 5 days? | 5/11/25 8:00 AM | 5/15/25 5:00 PM | 18 | Security Consultants |
| | Core Service Offering (Risk Assessment, Penetr... | 5 days? | 5/16/25 8:00 AM | 5/20/25 5:00 PM | 20 | Security Consultants |
| | Custom Service Bundles and Packages | 5 days? | 5/21/25 8:00 AM | 5/25/25 5:00 PM | 21 | Security Consultants |
| | Finalizing Pricing (Hourly, Project-based) | 5 days? | 5/26/25 8:00 AM | 5/30/25 5:00 PM | 22 | Security Consultants |
| | <input type="checkbox"/> Recruitment and Team Development | 60 days? | 5/31/25 8:00 AM | 7/29/25 5:00 PM | 19 | |
| | Job Role Definitions and Descriptions | 5 days? | 5/31/25 8:00 AM | 6/4/25 5:00 PM | 23 | Security Analysts;Security ... |
| | Candidate Sourcing | 10 days? | 6/5/25 8:00 AM | 6/14/25 5:00 PM | 25 | Security Awareness Trainers |
| | Interviewing and Hiring | 25 days? | 6/15/25 8:00 AM | 7/9/25 5:00 PM | 26 | Security Awareness Trainer... |
| | Team Training | 20 days? | 7/10/25 8:00 AM | 7/29/25 5:00 PM | 27 | Security Awareness Trainers |
| | <input type="checkbox"/> Implement a cyber security office | 60 days? | 7/30/25 8:00 AM | 9/27/25 5:00 PM | 24 | |
| | Cybersecurity Tools Installation | 30 days? | 7/30/25 8:00 AM | 8/28/25 5:00 PM | 28 | UPS;Firewall Appliances;Ro... |
| | Internal Communication and Collaboration Tool | 30 days? | 8/29/25 8:00 AM | 9/27/25 5:00 PM | 30 | Mobile Devices;Laptops/Des... |
| | <input type="checkbox"/> Implement operations and growth | 90 days? | 9/28/25 8:00 AM | 12/26/25 5:00 PM | 29 | |
| | Client Management Tools Setup | 25 days? | 9/28/25 8:00 AM | 10/22/25 5:00 PM | 31 | Marketing and Sales Team |
| | Day-to-Day Operations Management | 15 days? | 10/23/25 8:00 AM | 11/6/25 5:00 PM | 33 | Marketing and Sales Team;S... |
| | Partnership Development | 20 days? | 11/7/25 8:00 AM | 11/26/25 5:00 PM | 34 | Project Manager |
| | Expanding Service Offerings | 10 days? | 11/27/25 8:00 AM | 12/6/25 5:00 PM | 35 | Project Manager |
| | Team Growth | 20 days? | 12/7/25 8:00 AM | 12/26/25 5:00 PM | 36 | Security Consultants;Securi... |

CONCLUSION

| | |
|--|---------------------------------|
| Estimated Duration of the whole project: 1.5 year (547 days approximate) | Critical Duration: 472 days |
| Overtime Period/ Buffer: 547 days – 472 days = 75 days | |
| Estimated Cost/ Final Budget (After allocation): \$172,860.00 | Initial Budget: \$200,000.00 |
| Revised Budget: \$200,000.00 - \$172,860.00 = \$27,140 | |

Time Buffer:

The buffer time refers to the additional time factor in our project plan to ensure our project is not delayed when some of the sub-tasks get delayed. It is the period of overtime to resolve the project plan. The time buffer in our cybersecurity consultancy startup is extra time added to project schedules to account for unexpected delays or challenges. Since our cybersecurity projects can be complex and unpredictable, issues like technical difficulties, evolving security threats, compliance hurdles, or client-side delays can arise. By building in a time buffer, the startup ensures it has enough flexibility to handle these unexpected events without missing deadlines. This will help us to manage client expectations, reduce stress on the team, and maintain a high level of service quality. Time buffers is an important factor in cybersecurity, where delays can have serious consequences if systems aren't secured on time.

Revised Budget:

The revised budget in our cybersecurity consultancy startup is an updated version of the original financial plan. It adjusts for new or unexpected costs and changes in the business. For example, our startup might need to hire more staff or reduce the team, which affects salaries. It could also need to spend more on important security software or tools. The budget may change to cover costs related to certifications or meeting legal requirements. Other areas like office expenses, marketing to get new clients, and staff training might also be adjusted. Sometimes, emergency situations or extra client work can lead to changes in the budget. A revised budget will help us in the startup stay flexible and manage its finances effectively.