

Analysis for "SecureAccess Verify" Project

1. Work Breakdown Structure (WBS) for the Project

Phase 1: Project Planning and Requirements Gathering (7 days)

- **Task 1.1:** Requirements Analysis and Documentation
- **Task 1.2:** Technology Stack Selection
- **Task 1.3:** Project Plan and Timeline Creation

Phase 2: Development

- **Task 2.1:** Front-End Development
 - Develop UI for ID Card Validation
 - Develop UI for Face Recognition
 - Develop Product Page
- **Task 2.2:** Back-End Development
 - Set up Database for User Data and Validation Records
 - Develop API for ID Card Validation
 - Integrate Face Recognition API/Service
 - Implement Business Logic for Product Access Post-Validation
- **Task 2.3:** Integration and API Development
 - Integrate Front-End with Back-End
 - Ensure Proper Communication between Front-End and Back-End

Phase 3: Testing

- **Task 3.1:** Unit Testing (Front-End and Back-End)
- **Task 3.2:** Integration Testing
- **Task 3.3:** User Acceptance Testing (UAT)
- **Task 3.4:** Performance Testing (for Face Recognition and Validation APIs)

Phase 4: Deployment

- **Task 4.1:** Prepare Deployment Environment
- **Task 4.2:** Deploy to Production
- **Task 4.3:** Post-Deployment Monitoring and Bug Fixes

Phase 5: Maintenance and Support

- **Task 5.1:** Bug Fixes and Minor Enhancements
- **Task 5.2:** Performance Monitoring and Optimization
- **Task 5.3:** Customer Support and Training

2. Estimated Costs

Development Cost Estimation

Let's assume a blended rate of **\$50 per hour** for development work, which might cover developers, testers, and other roles.

Hours Estimate:

1. **Planning and Requirements Gathering:** 40 hours
2. **Development:**
 - Front-End Development: 120 hours
 - Back-End Development: 160 hours
 - Integration: 40 hours
3. **Testing:**
 - Unit Testing: 60 hours
 - Integration Testing: 40 hours
 - User Acceptance Testing: 40 hours
 - Performance Testing: 30 hours
4. **Deployment:** 30 hours
5. **Maintenance and Support (for the first year):** 200 hours

Total Estimated Hours: 760 hours

Total Development Cost: 760 hours * \$50/hour = **\$38,000**

Support Cost Estimation

Support costs typically include ongoing bug fixes, minor enhancements, and technical support.

1. Monthly Support Cost Estimate:

Let's allocate 20 hours per month for support.

Monthly Support Hours: 20 hours

Cost per Month: 20 hours * \$50/hour = **\$1,000 per month**

2. Annual Support Cost Estimate (First Year):

Annual Support Hours: 240 hours (20 hours/month * 12 months)

Cost per Year: 240 hours * \$50/hour = **\$12,000 per year**

Future Support Cost Estimation (One Year Later)

Support costs in the following years can increase due to inflation, increased complexity, or additional features. Let's estimate a 10% increase in rates for the second year.

- **Hourly Rate for Second Year:** $\$50 * 1.10 = \55 per hour
- **Monthly Support Cost for Second Year:** 20 hours * \$55/hour = **\$1,100 per month**
- **Annual Support Cost for Second Year:** 240 hours * \$55/hour = **\$13,200 per year**

Summary

- **Total Development Cost:** \$38,000
- **Support Cost:**
 - **First Year:** \$1,000 per month, \$12,000 per year
 - **Second Year (Estimated):** \$1,100 per month, \$13,200 per year
 - **Hourly Rate for Support One Year Later:** \$55 per hour

The Gantt Model

