



# Yerba Medical Project



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# About Yerba

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- Software used by Medical Insurance Companies
- Reduce insurance fraud and keep clients informed
- Using Google cloud database, Yerba securely stores all incoming claims from provided and clearinghouses.
- These claims are then analyzed and a message would be sent to the recipient using Google Firebase Cloud Messaging.
- The recipient can then check the details of the claim to make sure fraudulent activity isn't happening under their name

# Positions

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For our project we needed :

- Project Manager : to make sure that all tasks were being accomplished and were on time.
- Project sponsor : to fund our project and make key decisions
- Subject Matter Experts : who have expertise in a certain field that can help move the project along ( Human Resources and Accounting)
- Technical Experts : the people who actually will build our ios and web applications ( programmers, engineers and graphic designers)

# Failure

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- People - Employees who don't get along or people who don't share the common vision of the group
- Technology - Lack of the right equipment to get a job done
- Organization - When a company isn't making a project a priority (not proper funding or work environment)

# SDLC/PLC/Methodologies

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Our group went with Agile for our software development methodology:

- It is fast pace and allows us to get work done quickly
- Keeps everyone in the loop by having weekly sprint's
- Allows us to make changes to things we don't like during the project

# Successful Approaches

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- Leadership Style
  - Not just “one” correct way
  - Mostly used Authoritative
    - Lead by example, setting and following standards
  - Democratic
    - Used to give a sense of “inclusion” to team members
  - Coaching
    - Allows for training and development
    - Minor mistakes are fine as long as something was learned
  - Coercive
    - Rarely used; to prevent resistance
    - Only used when team members would not respond to other approaches

# Successful Approaches

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- Team members learned from failures
  - Bettering themselves for the future
- Constant evaluation
  - Ensures the project stayed on track
- Positive reinforcement
  - Recognizing success boosted morale
- One Team Mentality
  - Fighting and conflict gets us nowhere
  - Occasional lunches allowed team building

# Knowledge Areas

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- Well-defined scope from the beginning of the project
  - Rigorous change control helps maintain the scope
  - We decided to reduce an over-exaggerated scope to ensure we could complete the goal of the project in a reasonable time while maintaining value.
- Project phases planned out in advance
  - Allowed us to gauge progress throughout the project
- Payments by deliverables, not by hours worked
  - Prevents slacking off just for the paycheck
  - Encourages fast, quality work



# Knowledge Areas

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- Good HR management is extremely important
  - Though not easily achievable
    - Not all team members work at high standards
    - Sometimes this meant termination in cases where issues were unresolvable
- Communication is key
  - Timely and accurate communication is necessary
  - Not an issue for Yerba's project, no major communication issues arose
- Risks must be logged
  - RAID Log
  - Constant documentation and quick response to risks
  - Allowed project to stay on track

# Business Case

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- MOV
- Project alternatives
  - Pre-defined to prevent starting from scratch
- Costs
- Benefits
- Risks
  - Identifying, assessing, and responding
- BCP (Business Continuity Plan)
  - Prevents threats
- DR (Disaster Recovery)
  - What to do if a risk does become an issue

# MOV

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- MOV Purpose
  - Allows conceptualization of the value
- Value proposition
  - Gives value to both the insurance company and the customers
  - Comes from different things
    - Decreased frequency and severity of insurance fraud
    - Saves insurance companies from paying out on false claims
    - Prevents customer overpayment or loss of benefits
      - Which causes out of pocket costs for the customer

# Risk Overview

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- Can choose different approaches:
  - Acceptance, Avoidance, Mitigation
  - The approach depends..
    - Nature of the risk, the threat, and the impact on the MOV
- Internal/External
  - Internal - Problems arising from the team
  - External - Issues such as budget cuts or deadline changes
- Tools
  - Most Used: SWOT Analysis, Qualitative Risk Analysis (Expected Value)
    - Cheaper and less time-consuming
  - Also: Interviews
    - Takes a bit longer, but still effective

# Risk Response

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- Response Plan
  - Identify the risk
  - What triggers it
  - Who owns up to it
  - How to respond to it
- Monitor
  - Audits
  - Meetings
- After...
  - Evaluate! Document and learn from mistakes.

# Our Scenarios

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- What Happened
  - The main issue at the inception of the project was the issue of deciding upon the programming language to use. The development team had a strong proficiency in multiple languages so it was a battle between each of the developers favorite language.
- What we did
  - To solve the issue at hand we used java because among all of the development team they all had the least resistance to using that language as the main programming language.

# Our Scenarios

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- What Happened
  - The second issue was over the means of communicating with the recipient of the healthcare. Originally the team wanted to use twilio, which is a tool used by many successful companies such as uber.
- What We Did
  - Due to the general lack of knowledge among the developers with the capabilities of Google Firebase, trying to convince the team to keep the communication within the web app was challenging.
  - The decision was finally made when it was discovered that firebase communication within the web app was approved by HIPPA for a secure communication channel for sensitive documents.

# Our Scenarios

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- What Happened
  - The third issue we faced was reasonable scalability. The plan at the original inception prior to the business plan was to have a full circle incorporation of every participant of the healthcare insurance system.
- What We Did
  - Rather than trying to force every provider of healthcare within the system to use our product, we eliminated that step in the cycle and began the entry of data from the point of the receipt of the claim from the provider or clearinghouse.
  - This was because there is a standard format that all claims must be in to submit to a Insurance company,



# Infrastructure

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- Individuals with a background in coding at least one language
- Everyone understood expectations
  - From the most experienced to the least experienced
- All team members had a level knowledge base
  - Eliminated possibility of feeling “less than” a senior team member
  - Claims are stored with the primary key as the member ID because it is consistent through the entire process.

# Documentation

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- Necessary in any project
- Allows progress to be tracked
- Prevents repetition of certain mistakes
- RAID Log
  - Risks
  - Assumptions
  - Issues
  - Dependencies

# Triple Constraints

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- Time, budget, and scope
- When one of these are affected, so too will the others
- Regardless of their rank or position, make sure all stakeholders are aware of and respect the idea of the triple constraint.
- These aspects are interdependent and very important to a projects success.
- Had to refute the requests of a shortsighted sponsor who didn't understand or care for the triple constraints.