

Fraud Ops Training Mission Game Design Document: Design Document Compiled

Game Overview

Fraud Ops Training Mission is a learning game created to enhance the training program for complex security investigation skills at a financial institution. This game offers an engaging experience to help learners apply procedural skills learned through instructor-led training. The game presents learners with simulated role-play scenarios and interactive exercises for various systems used to perform job duties. The game also seeks to increase the proficiencies of learners' soft skills, such as attention to detail, problem-solving, deductive reasoning, and critical thinking, which are essential for job performance.

Target Audience

This game has been designed primarily for new hire investigators joining the Fraud Operation Team in the security department. However, it will train existing investigators to enhance their skills as they progress in their current roles. The educational requirement for new hires is a high school diploma or higher. Banking, fraud knowledge, or security experience is desired but not required. New hires and existing employees are diverse in skills, subject knowledge, education, age, gender, goals, abilities, and other characteristics. Therefore, the game was created to captivate a wide range of players, considering game mechanics, security awareness, and financial expertise.

Learning Content

The main objective of Fraud Ops Training Mission is to incorporate practice training for various systems utilized by investigators to analyze suspicious account behavior. These systems offer in-depth data on personal identification and device usage. Learners are prompted to navigate systems independently through role-play exercises to differentiate between legitimate

and fraudulent activities in real-life situations involving accounts or identification details.

System simulations will be integrated into gameplay using storyline 360's interactive simulation, featuring screenshots of live accounts as examples to immerse learners in realistic scenarios and create safe training environments for practice.

Rationale and Learning Context

This security training is an addition to the current curriculum, which is being revamped for investigators who are internal and external hires. The security investigator role is considered the most challenging and complex customer service role within the financial institution. The training consists of a four-week program that is complex and fast-paced. The technical training is delivered over eight days and consists of basic skills, system tutorials, and procedural lessons. The training is structured to teach the skills and systems based on the call type. Investigators assist members over the phone whose accounts have been restricted due to suspicious activity to determine whether the member is a scam victim or committing first-party fraud. This is achieved through probing questions regarding the activity and utilizing different systems to verify that the information matches the activity confirmed. Summative evaluations for the training program revealed subpar performance among new employees 60 days post-training. The performance gap is attributed to using "live" third-party systems that do not provide training environments for hands-on practice—leading to a decreased ability to apply procedures learned in training to real-world situations, resulting in poor performance or the need for additional training sessions. The game will embed simulations for each system within the context of the storyline. This will allow learners to experience controlled, real-world simulations to transfer procedural knowledge learned to the real world.

Game Genre

Fraud Ops Cyber Hack is an immersive first-person single-player adventure game. Throughout the game, players will encounter 5-8 escape rooms, each offering different call scenarios that mirror calls Investigators will encounter. Each room will contain a series of five puzzles, designed as objects hidden in plain sight. The objects embedded in the rooms and puzzles will pertain to information investigators need to know for procedures specific to the room's call scenario. Each puzzle provides a clue to the next, eventually leading to the key to unlock the next room's door. However, the puzzles within each room could be completed in any order, allowing the player to choose the gameplay progression.

Major/Primary Goal

The primary goal of the Fraud Ops Training Mission is to complete various call simulations for the main real-world scenarios they will encounter when assisting callers over the phone. The games call simulations will prompt Investigators to practice assisting account holders whose accounts have been restricted because of suspicious activity. This is done by asking probing questions and examining different systems to verify information provided by account holders against confirmed activity. Through this review, investigators determine whether the account holders are victims of a fraud scheme or are themselves involved in fraudulent activities.

Secondary/Alternative Goal

The second objective is to enhance competencies in the fundamental soft skills required by Investigators to effectively carry out their job responsibilities, which are usually developed over time and through experience. These soft skills encompass problem-solving, deductive

reasoning, and critical thinking. This will be accomplished through the integration of different puzzles into the game's storyline. Learners will need to solve these puzzles to move on to the next challenge. They will also have the opportunity to use hints, if necessary, in order to ensure their ability to advance through the game and achieve the main goal.

Game Rules and Player Actions:

The game rules for Fraud Ops Training Mission are simple. Players will be expected to follow the storyline to find clues to solve puzzles and simulations in sequential order. Hints will be provided if needed to help players progress through the game. A time element will be embedded in the storyline itself, and players will be given a set amount of time for gameplay for the day. There will not be a play clock element to ensure players are not rushing through simulations to complete it to continue the game progression. Hints will be provided to help guide players using text prompts. Learners are required to finish all four main rooms to receive a badge for each room finished. The entire game can only be completed once all four rooms have been finished. Upon completing each room, players will receive a badge puzzle piece that will eventually form their final Investigator badge, indicating the successful completion of their training and their promotion from Rookie to Investigator in the real world.

Learning Topic Integration

The game will integrate the primary learning material into the puzzles found in each room. Simulations will be segmented, with each section or puzzle focusing on specific systems used based on call scenarios. Participants will be led through calls, practicing their critical thinking and deductive reasoning skills to determine the appropriate probing questions and actions to take on accounts. Players will use soft skills when deciphering puzzle clues. Learners

will progress through call scenarios step by step with support from the BOT team, if needed, to practice hands-on in a controlled environment. Continuous feedback will be provided during the simulation to ensure learners accurately assess and understand the activities. For instance, the initial escape room will concentrate on identity theft procedures and systems for four different call scenarios pertaining to identity theft situations encountered in real-world application, as seen in Figure 1. The first puzzle will serve as a refresher on procedures related to identity theft calls where a BOT assistant will explain the procedures step then prompt the player to complete the action providing feedback on why each step is taken. The second puzzle, learners will practice procedural steps with feedback provided and the option for assistance using a help button if needed. The third puzzle sequence will prompt players to complete the call scenarios with the option for assistance through a help button accessed on the UI. The fourth puzzle will require learners to apply procedural steps independently without assistance. For the final puzzles, learners will use deductive reasoning to decode a message to unlock the rooms safe and earn their puzzle badge piece.

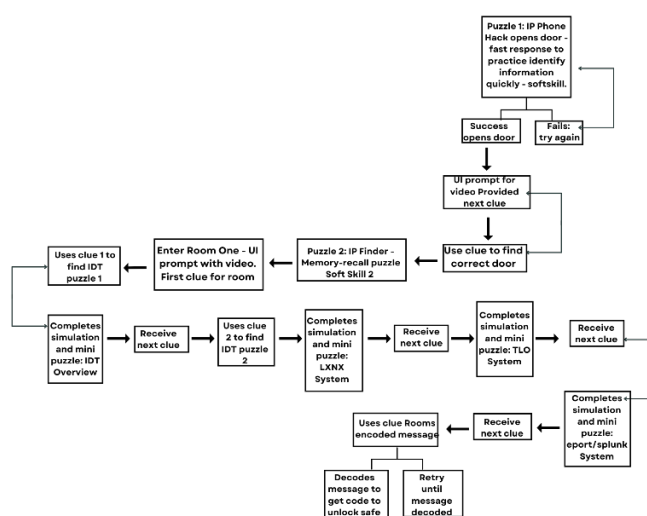


Figure 1: Game play and learning content integration

Backstory

The game will open with the main menu screen, which features four tabbed buttons: main menu, objective, controls, and play. The main menu screen provides players with the following backstory.

- **Main Menu:** " You have been selected to join the elite force of Fraud Ops Investigators.

Your mission, if you choose to accept it, is to help CYBUS and his bot team track down known cybercriminals. This hacker is attempting to breach our server systems to steal personal identification and financial information and exploit innocent victims."

- **Objective:** "Complete the training mission to earn your Investigator badge. Help the BOT and Investigator team secure the servers from the cyber criminal's malicious attacks. Search the security rooms looking for different clues the BOT team needs to secure the systems and help Investigators assist victims of fraud scams protect their assets from being exploited for fraud by cybercriminals. You must work fast. Until all the servers are secured the criminal could attack the systems again to steal information to exploit victims. Good luck, rookie the team is counting on you!"

Character

Players will assume the role of a newly recruited rookie investigator, interacting with the game world directly from a first-person perspective. No avatar character or artwork is used to allow for complete immersion of players to fully assume the main character's role.

Game World Description

Upon entering the game world, players will find themselves engrossed in an interactive high-tech 3D cyber security center containing numerous server rooms of a financial institution used to store clients' confidential information. This realistic, life-like world consists of a two-story facility that players can freely explore except for the secured server rooms. Due to the facility's security, server rooms have

restricted access and require security clearance, which involves the player solving a puzzle to unlock the room's door. The server rooms have been designed as offices that house confidential client information and high-tech computer systems monitoring specific fraud activity. The only interactive objects within the game pertain to the storyline and gameplay. This intentional design decision ensures that players complete the storyline's practice simulation within the designated gameplay time for the training program. Players will also be engaged through additional elements such as sci-fi background music to elicit emotional responses and sound effects to immerse them into the realistic cyber world environment.

Setting

Gameplay will begin in the facility's training room. Players will be prompted to watch an urgent video message from Cybus, the BOT leader, who will provide them with the mission brief.

- **Mission Brief:** "Hey Rookie! Cybus here. There's been a cyber-attack that locked the security center down, taking the servers offline. Looks like a fraud ring of cyber criminals used a BOT system to open new accounts and hack current accounts. The BOT team restricted most new accounts from opening and suspicious activity on current accounts for manual review. You're on deck, Rookie! We need to work quickly to review these accounts and look for any clues that can help us locate this fraud ring. Time to show us what you got! "

Scenario

Players will be provided their first clue at the end of the mission brief, prompting them to locate the identity theft server room. Once the correct door is identified, players will complete a memory puzzle to unlock the door. As the player enters the room, they will experience an alarm and flashing red lights with a prompt to watch another urgent video message from the BOT team. Players will use clues

from the BOT team to locate objects hidden in plain sight. Each object prompts players to complete a call simulation and puzzle to earn a reward: a piece of a cipher. Once players have collected all the pieces, they will use the cipher to decrypt a message left by the cyber criminals, providing a code to unlock a safe hidden in the room. The safe contains a puzzle piece badge and the clue for finding the door to the next server room.

User Input and Output

The Fraud Ops Training Mission is a PC game explicitly designed for a desktop with a mouse and keyboard. Users will encounter a simple user interface with five menu buttons arranged vertically on the top left corner of the UI. This layout enables a full-screen camera view, facilitating the search for clues. Player controls align with standard first-person shooter controls except for pacing, which has been modified to be slightly slower to cater to novice or inexperienced players. Players will use keyboard commands and mouse movements to explore and interact with objects in the game, as seen in Figure 1 below.



Figure 1: The Controls Menu players will review upon game opening outlining the different key commands.

Game Flow and Level Progression

The game consists of escape rooms. Each room is locked until the previous room is completed successfully. Players have unlimited chances to complete puzzle simulations to reinforce transfer and retention. If a player executes an incorrect action, they will be instructed to try again until it is correct.

The difficulty will increase as players advance through each puzzle simulation but will reset at the beginning of each room. At the most challenging level of play, players will be expected to navigate the call simulation and review the systems independently. However, a help button will be available for guidance for the easy, medium, and hard levels if needed. The sequence of level progression is outlined below:

- **Easy:** The first simulation provides detailed step-by-step instructions for identifying and performing procedural steps. The BOT team will explain each procedural step, having the player practice each step.
- **Medium:** Players will be advised of the next steps needed to act without guidance. For example, the BOT will advise that the search results need to be reviewed for red flags, but the player would need to perform the procedural steps and review the information on their own.
- **Hard:** Players will independently identify and perform procedural steps with the help option if needed. The BOT will advise the player of the caller's identification information asking them to assist the client by reviewing their information. They will be expected to perform all procedural steps independently.
- **Advanced:** This will be an optional bonus puzzle that players can complete independently without any assistance or help option for guidance.

Play Support Features

The game will begin with the main menu showing on the screen that provides a brief back story for game play. The decision to have the game start on the menu screen was inspired by the game Little Big Planet, in the expectation that players would explore each screen before

starting to play the game. The menu will include several pages, a game objective page and an overview of player controls.

- **Game Controls:** The game features a variety of universal controls to cater to the preferences of all players, regardless of their dominant hand or level of experience. Users have the option to utilize the traditional arrow keys or the WASD controls commonly found in first-person shooter games to move their character in different directions. These navigation command keys are coded into the game and can be used at any time without players having to change a setting. The camera view is controlled by the mouse. Players have the option to switch between automatic mode or manually click and drag to adjust the camera view. By pressing the M key on the keyboard, this action can be changed. Manual mode also displays the mouse cursor on the screen, allowing players to left or right-click to interact with objects. To reduce learning curve and provide ease play, the HUD displays a prompt for the key command as well. The sensitivity for both navigation and camera controls has been reduced for less experienced players without disrupting play for experienced gamers' play.
- **Objective:** The objective screen offers players a comprehensive overview of the game's objectives. It presents a synopsis of the gameplay that is integrated into the game's storyline. Specific rules were omitted as the game adheres to standard gaming rules and is designed to assist players, if necessary.

Additional play support will be provided using text prompts and the “BOT” team. These characters will provide clues and directions for the next steps players should take or navigate in order to win the game. A HUD has been created to provide players easy access

to specific play support screens which include, main menu screens, pause, settings, controls, inventory, and game exit buttons. The game has been created to enable players to explore the game world to a certain extent without causing any distractions. For instance, the doors to the server room are locked, which prevents players from exploring every room on each level. The doors will only open and stay open once the prerequisite room has been completed. Other subtle clues such as marquee arrows and signs have been incorporated to provide additional guidance for different elements of game play.

Learning Support Features

The learning support features have been created with a dual purpose in mind, serving both as a means of play and as a tool for learning. The aim was to offer assistance that caters to the needs of all players without causing distraction. The first escape room featured in the prototype is designed as more of a tutorial or an easy level that offers prompts and guidance for each step players should take. As the level progresses, learning support elements will gradually decrease resulting in an increase in difficulty. This progression will also be used throughout each level. The first challenge players are presented with is a call scenario that outlines one system used for identity theft calls. Learning is supported through step-by-step guided instructions provided by a BOT character following the explain it, show it, have them do methodology. As players progress through the challenges, they will learn additional systems that they will use for each call scenario challenge. They will be provided with less step-by-step guidance and will be challenged to complete the procedural steps themselves. However, a help or hint button will still be available to assist if needed. As the levels progress, less guidance will be provided for each challenge within each room. The final room will consist of call scenarios

for each topic covered in the previous rooms. Players will be expected to apply the procedures learned in each room to each of the four call scenarios. No guidance will be provided for the challenges in the final room, but players will have the option to use help or hints if needed.

Link to Game Prototype:

https://storage.googleapis.com/fraudopstrainingmission/VK_FraudOpsTrainingMission.zip

Link to video walkthrough:

<https://storage.googleapis.com/fraudopstrainingmission/Fraud%20Ops%20Training%20Game%20Demo.mp4>

Storyline 360 Simulations Embedded into Game:

- <https://storage.googleapis.com/fraudopstrainingmission/IDT%20Room%20Puzzle%20One/story.html>
- <https://storage.googleapis.com/fraudopstrainingmission/LXNX%20Scrubbed%20Simulation/story.html>
- <https://storage.googleapis.com/fraudopstrainingmission/TLOGameSim/story.html>
- <https://storage.googleapis.com/fraudopstrainingmission/ePortGame%20Sim/story.html>
- <https://storage.googleapis.com/fraudopstrainingmission/IDTGameLock/story.html>