Gamified, Scenario-based Learning

Jaimee Westin & Adam Barbary
Centre for Academic Development (CAD)

Special Credit to Eammon Jones who was instrumental to much of the project

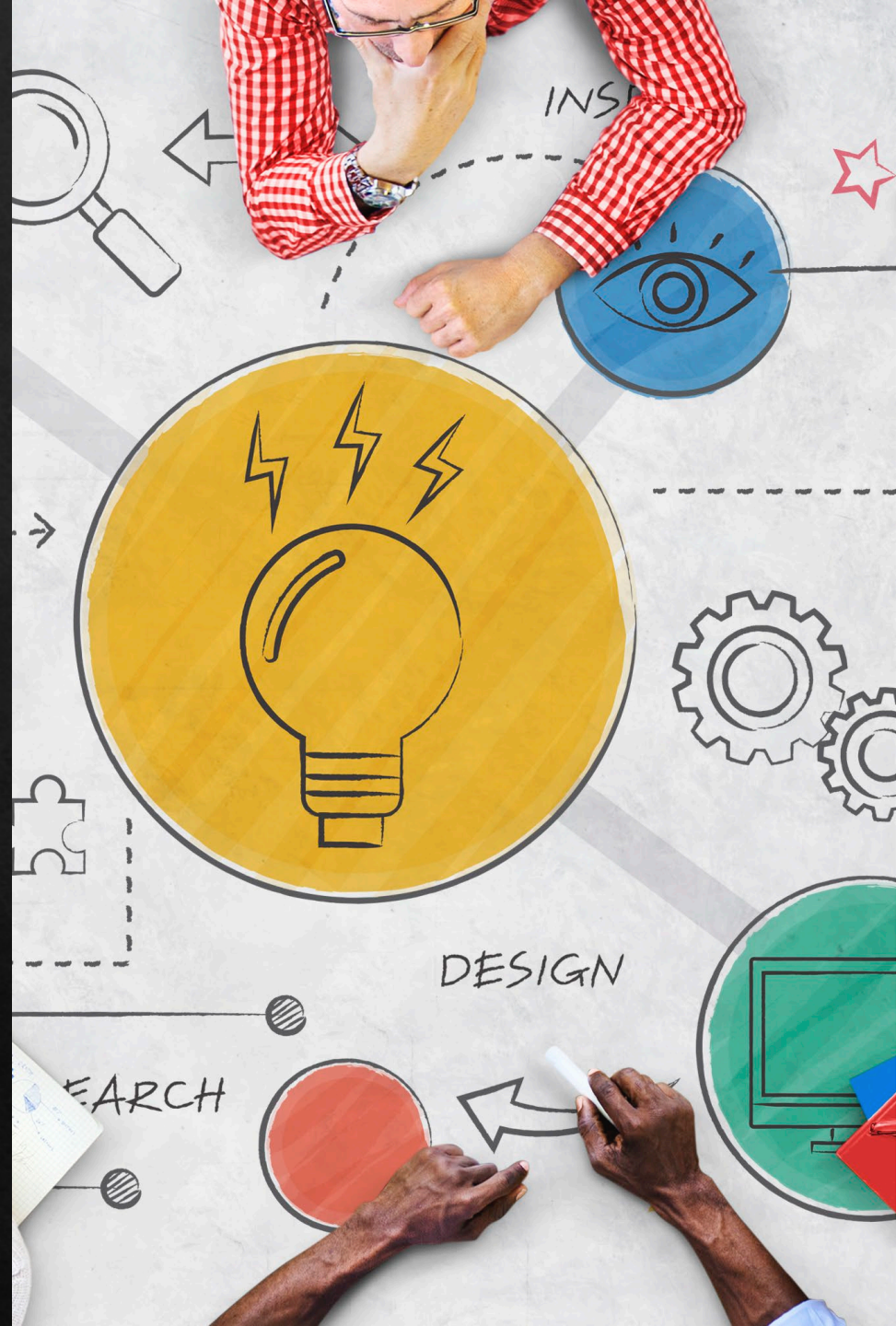
About **Digital Narratives**

Client to complete the Digital Narrative Master Template document with assistance from us.

- Digital Production Terms/ Timeframes/ Filming options/Roles and Responsibilities etc
- Project Scope
- Key themes to cover for student learning
- What does the “World” look like?
- Character overview (Who and basic characteristics)
- DP to assist with Character breakdown (Specific personalities to develop the script)
- Each video overview and dot points on major things that will happen or be found
- Sign off

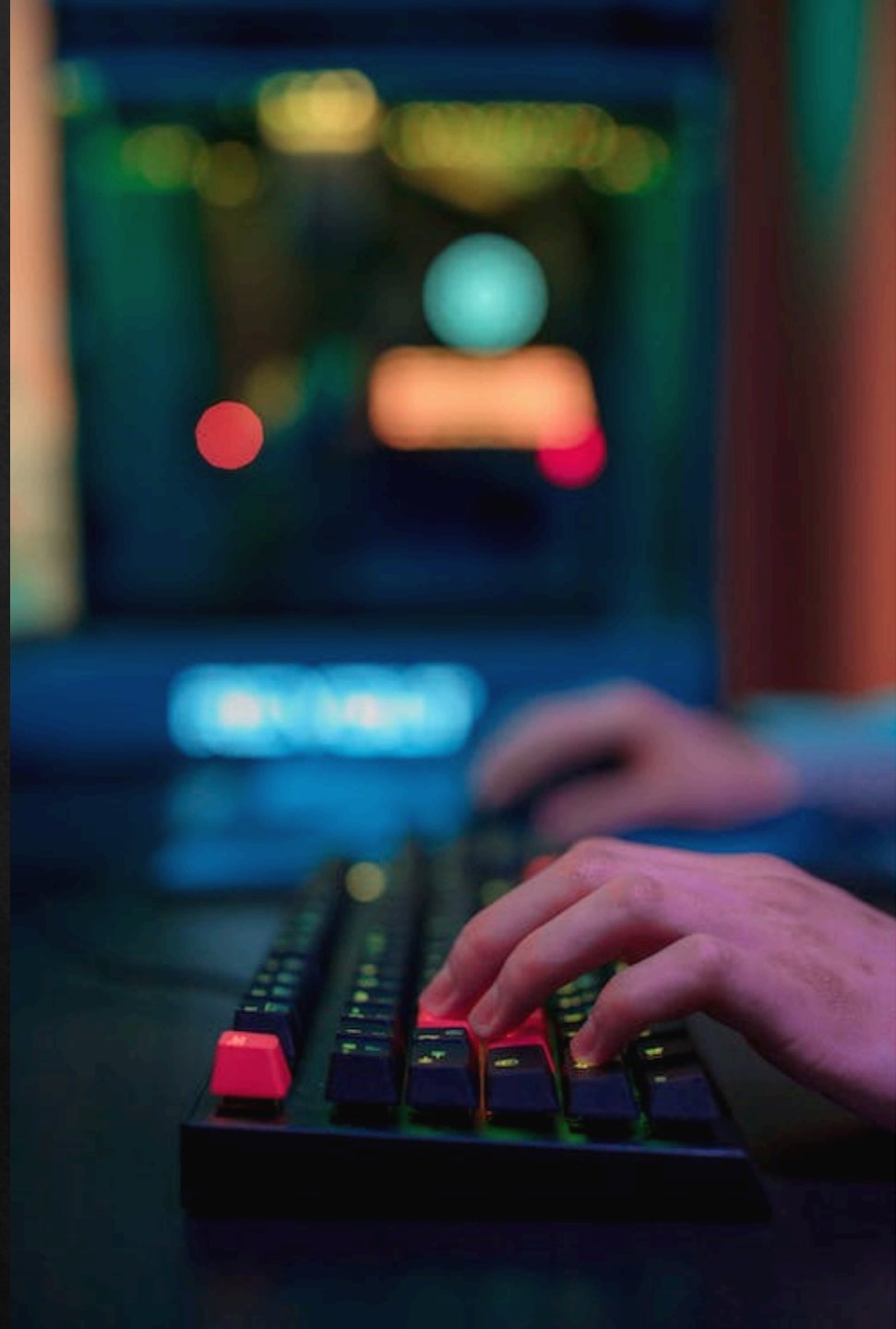
Scoping with Academic

- Typical digital narratives
- What is the incident that has occurred?
- What are the learning objectives?
- What does a typical OHS investigation look like?
- Budget – In this case, all actors were staff who donated their time.
- Ideally, we would use professional actors paid a small fee for a higher quality.



Gamification Principles

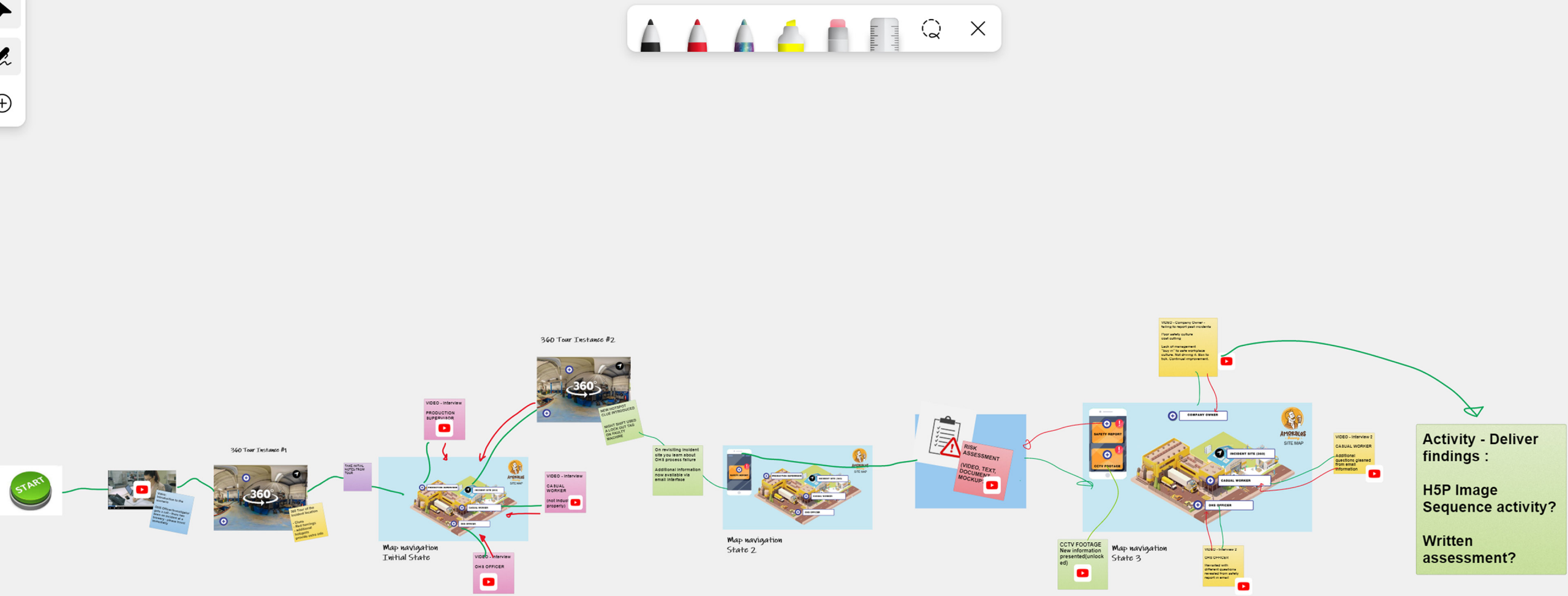
- Narrative
- Immersion
- Interaction
- Immediate Feedback
- Scaffolded Learning
- Progress Indicators



How will it **look?**

- How will the experience be presented?
- Branching or linear
- What instructions do students require?
- How many videos to be scripted and filmed?
- Additional artifacts – photoshopped elements, virtual tours, character profiles etc.

Mind maps – How will it **work**?


START
360 Tour Instance #1
360°
360 Tour of the incident location
- Clues
- Red herrings
- additional hotspots/ extra info
TAKE INITIAL NOTES FROM TOUR
VIDEO - Interview
PRODUCTION SUPERVISOR
VIDEO - Interview
CASUAL WORKER
(not indust properly)
VIDEO - Interview
OH & OFFICER
Map navigation
Initial State
360 Tour Instance #2
360°
NEW HOTSPOT CLUE INTRODUCED
NIGHT SHIFT USED A LOCK OUT TAG ON FAULTY MACHINE
On revisiting incident site you learn about OH S process failure
Additional information now available via email interface
Map navigation
State 2
RISK ASSESSMENT
(VIDEO, TEXT, DOCUMENT MOCKUP)
VIDEO - Company Owner - failing to report past incidents
Poor safety culture
cost cutting
Lack of management "buy in" to safe workplace culture. Not driving it. Box to tick. Continual improvement.
SAFETY REPORT
CCTV FOOTAGE
COMPANY OWNER
INCIDENT SITE (360)
CASUAL WORKER
OHS OFFICER
SITE MAP
CCTV FOOTAGE New information presented(unlocked)
Map navigation
State 3
VIDEO - Interview 2
CASUAL WORKER
Additional questions gleaned from emails information
VIDEO - Interview 2
OHS OFFICER
Interacted with different questions revealed from safety report in email
Activity - Deliver findings :
H5P Image Sequence activity?
Written assessment?

360 Tour Instance #1

Video:
Introduction to the scenario

OHS Officer/Investigator gets a call - there has been an incident at a brewery - please travel immediatly

360 Tour of the Incident location

- Clues
- Red herrings
- additional hotspots
provide extra info

360 Tour Instance #2

NEW HOTSPOT CLUE INTRODUCED

NIGHT SHIFT USED A LOCK OUT TAG ON FAULTY MACHINE

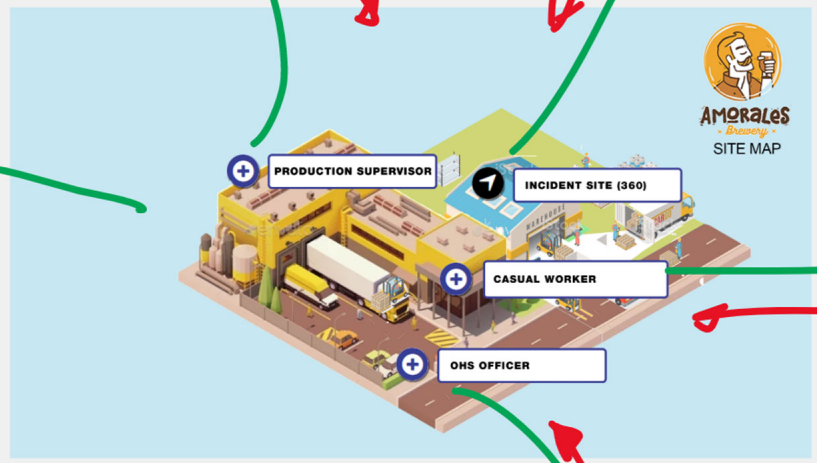
On revisiting Incident site you learn about OHS process failure

Additional information now available via email interface

VIDEO - Interview

PRODUCTION SUPERVISOR

TAKE INITIAL NOTES FROM TOUR



VIDEO - Interview

CASUAL WORKER

(not induct properly)

VIDEO - Interview

OHS OFFICER

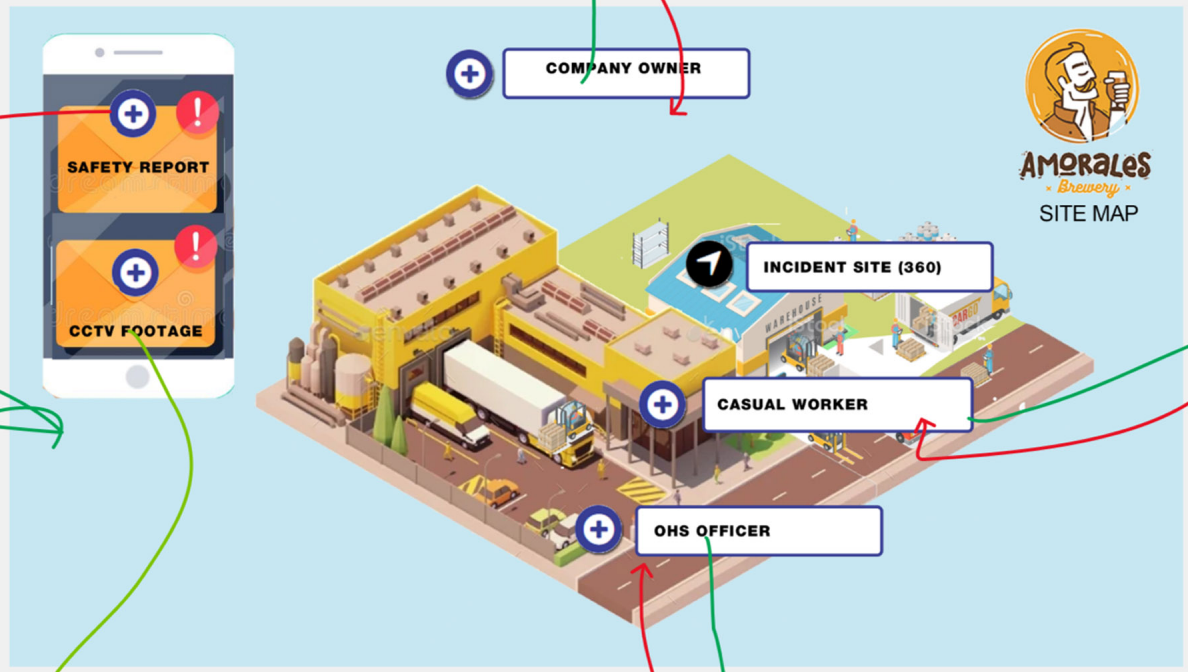
Map navigation Initial State

Map navigation State 2

VIDEO - Company Owner - failing to report past incidents

Poor safety culture
cost cutting

Lack of management "buy in" to safe workplace culture. Not driving it. Box to tick. Continual improvement.



VIDEO - Interview 2

CASUAL WORKER

Additional questions gleaned from email information

Activity - Deliver findings :

H5P Image Sequence activity?

Written assessment?

CCTV FOOTAGE
New information presented(unlocked)

Map navigation
State 3

VIDEO - Interview 2

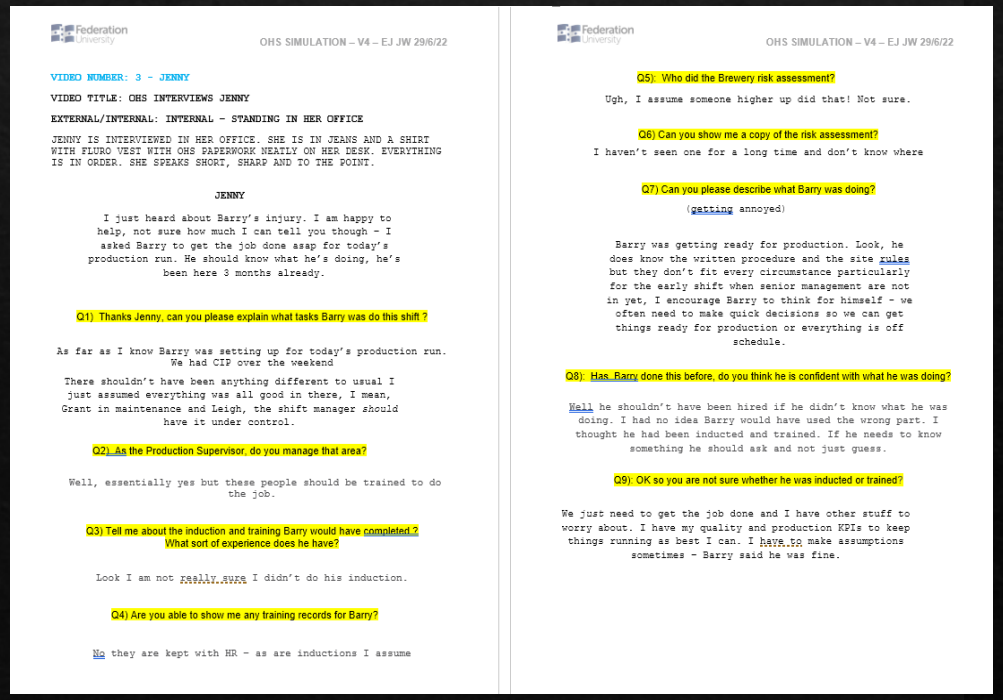
OHS OFFICER

Revisited with different questions revealed from safety report in email

Characters & **Scripts**

CHARACTERS

- The student is the OHS Officer in this case interviewing their coworkers and gathering investigative data to come up with a conclusion.
- Create character dot points – Age, gender, look, dress, act
- Specific elements that may impact their ‘job’ and productiveness
- Due to generally having no budget the characters somewhat have to be molded around those available to help and specific personalities.



Federation University

OHS SIMULATION – V4 – EJ JW 29/6/22

VIDEO NUMBER: 3 - JENNY

VIDEO TITLE: OHS INTERVIEWS JENNY

EXTERNAL/INTERNAL: INTERNAL - STANDING IN HER OFFICE

JENNY IS INTERVIEWED IN HER OFFICE. SHE IS IN JEANS AND A SHIRT WITH FLURO VEST WITH OHS PAPERWORK NEATLY ON HER DESK. EVERYTHING IS IN ORDER. SHE SPEAKS SHORT, SHARP AND TO THE POINT.

JENNY

I just heard about Barry’s injury. I am happy to help, not sure how much I can tell you though – I asked Barry to get the job done asap for today’s production run. He should know what he’s doing, he’s been here 3 months already.

Q1) Thanks Jenny, can you please explain what tasks Barry was do this shift ?

As far as I know Barry was setting up for today’s production run. We had CIP over the weekend

There shouldn’t have been anything different to usual I just assumed everything was all good in there, I mean, Grant in maintenance and Leigh, the shift manager *should* have it under control.

Q2) As the Production Supervisor, do you manage that area?

Well, essentially yes but these people should be trained to do the job.

Q3) Tell me about the induction and training Barry would have completed ? What sort of experience does he have?

Look I am not really sure I didn’t do his induction.

Q4) Are you able to show me any training records for Barry?

No they are kept with HR – as are inductions I assume

Federation University

OHS SIMULATION – V4 – EJ JW 29/6/22

Q5): Who did the Brewery risk assessment?

Ugh, I assume someone higher up did that! Not sure.

Q6) Can you show me a copy of the risk assessment?

I haven’t seen one for a long time and don’t know where

Q7) Can you please describe what Barry was doing?

(getting annoyed)

Barry was getting ready for production. Look, he does know the written procedure and the site rules but they don’t fit every circumstance particularly for the early shift when senior management are not in yet, I encourage Barry to think for himself – we often need to make quick decisions so we can get things ready for production or everything is off schedule.

Q8): Has Barry done this before, do you think he is confident with what he was doing?

Well he shouldn’t have been hired if he didn’t know what he was doing. I had no idea Barry would have used the wrong part. I thought he had been inducted and trained. If he needs to know something he should ask and not just guess.

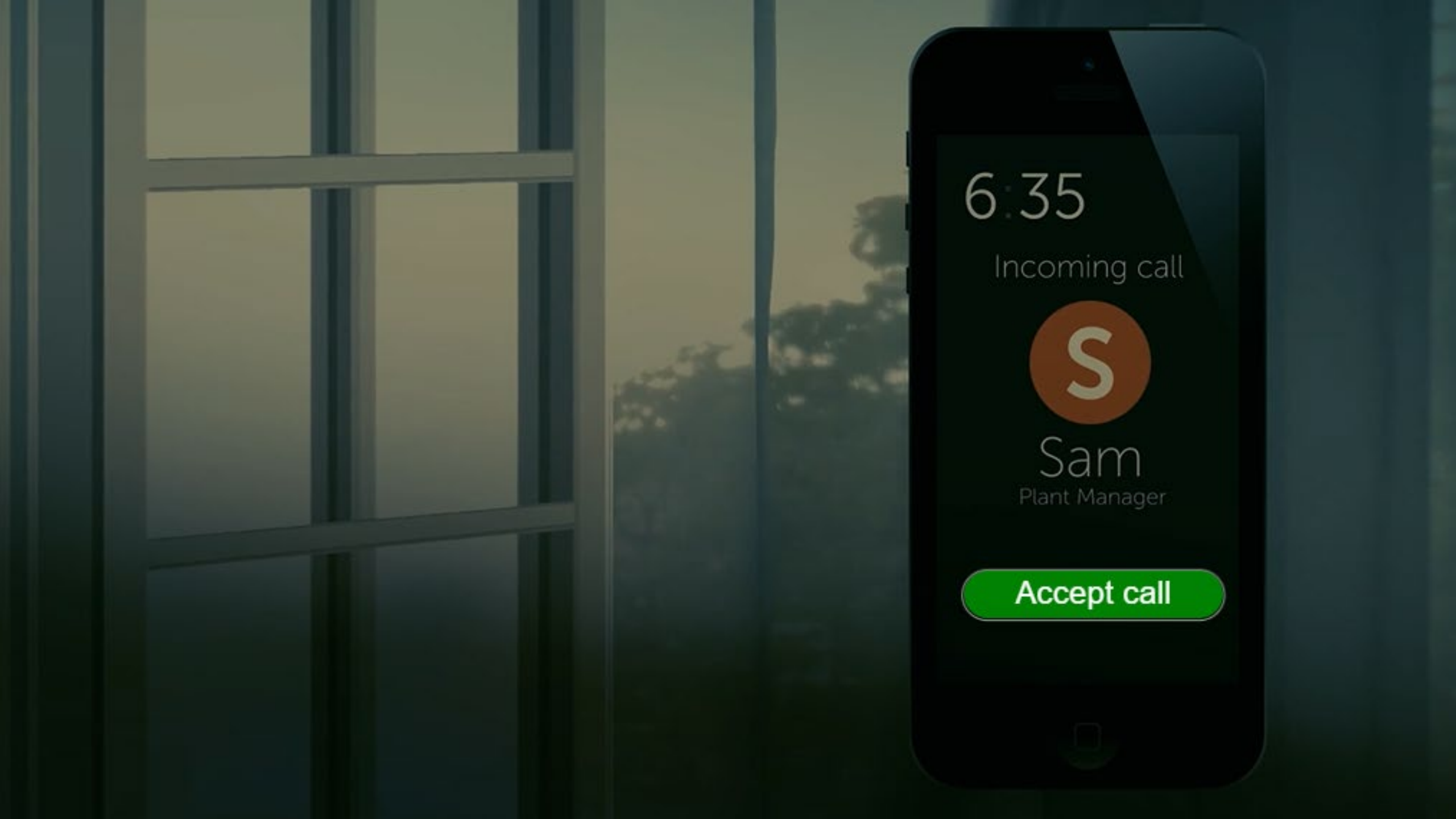
Q9): OK so you are not sure whether he was inducted or trained?

We just need to get the job done and I have other stuff to worry about. I have my quality and production KPIs to keep things running as best I can. I have to make assumptions sometimes – Barry said he was fine.

SCRIPTS

- Incorporate the specific talking points from SME/Academic
- Incorporate specific actions to portray their personality
- Linking scripts to other scripts “This person noted XYZ, go have another chat to them again” like a real life conversation
- Characters adding in clues and building the case on “where are the potential issues within this company arising from”
- Where will the locations be? We chose Greenscreen in this case.
- Add in the questions (yellow highlight) so the student user can ask (3 – 5 different questions) linking to various responses like a conversation
- Jaimee writes scripts – I did complete an online script writing course.

Let’s have a look at **the final product**


6:35
Incoming call
S
Sam
Plant Manager
Accept call

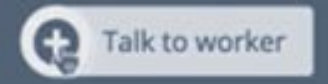
INCIDENT INVESTIGATION

You must conduct an incident investigation at your workplace.

Follow on-screen tasks to complete your report.

Click and drag to navigate 360° rooms

Select ⊕ to interview and gather information



Click ➤ to explore new areas in 360°

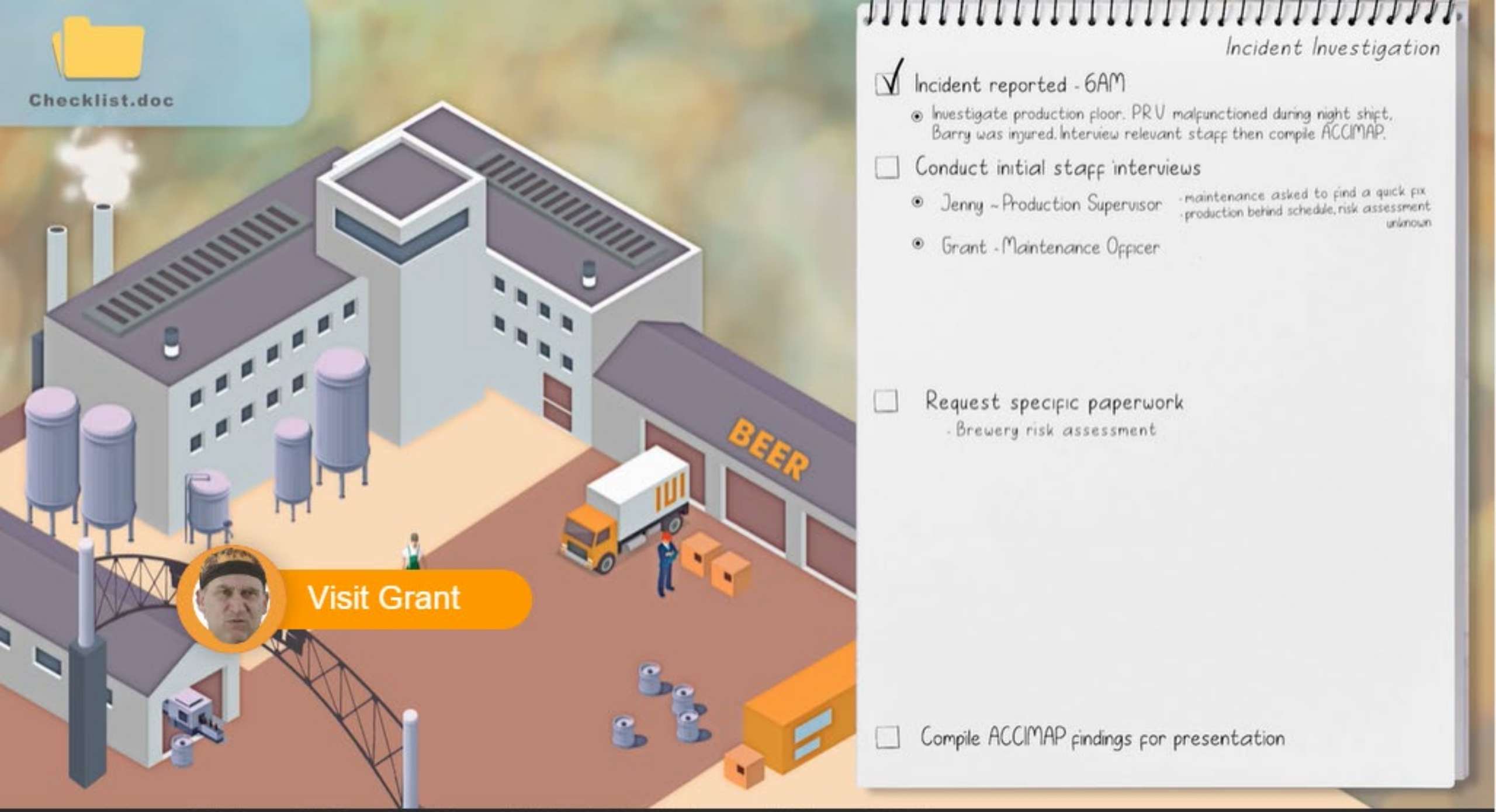
Incident Investigation

- [ ] Incident reported - 6AM
  - Investigate production floor.

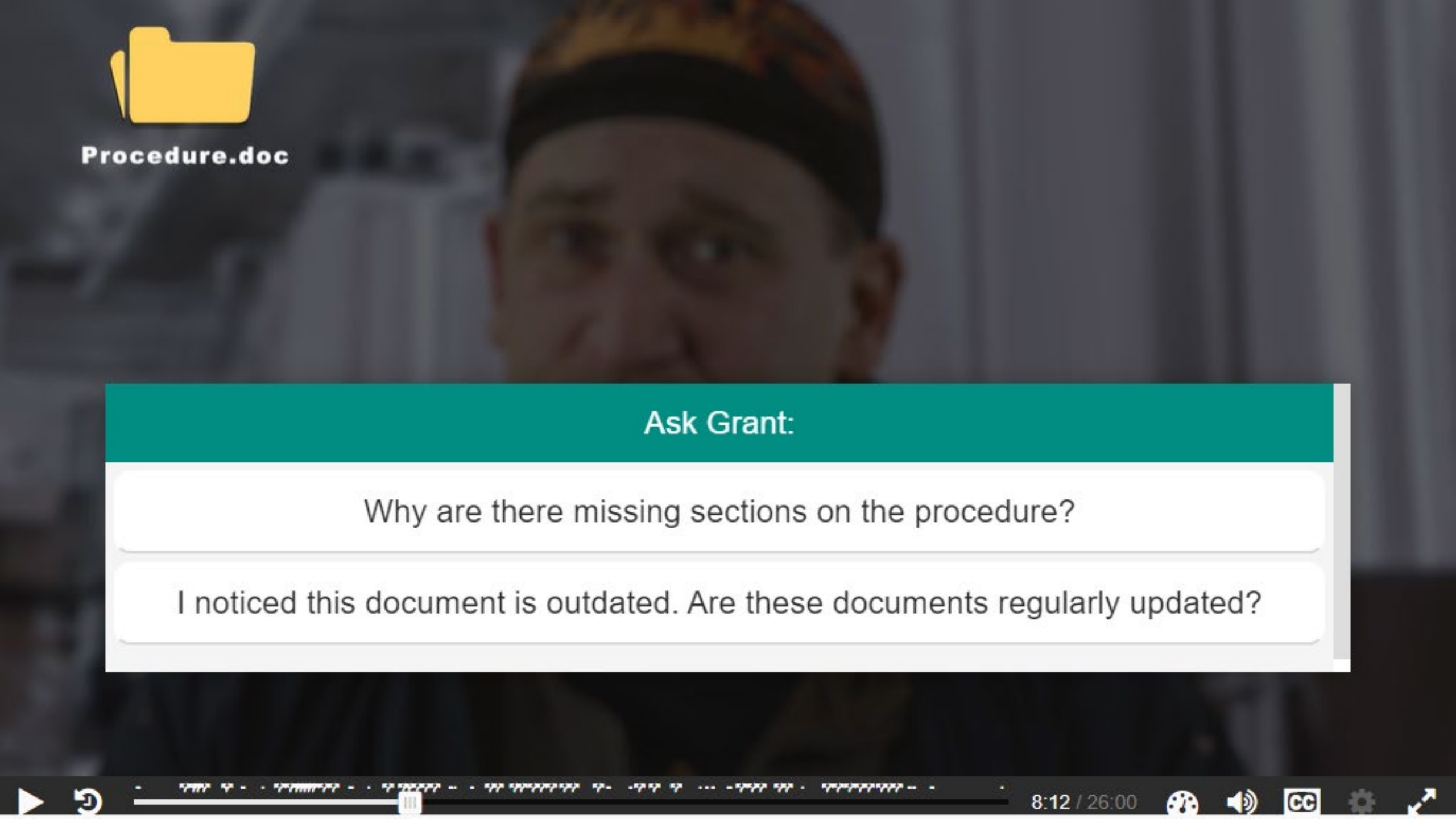
Investigate production floor then visit Plant managers office (Sam)

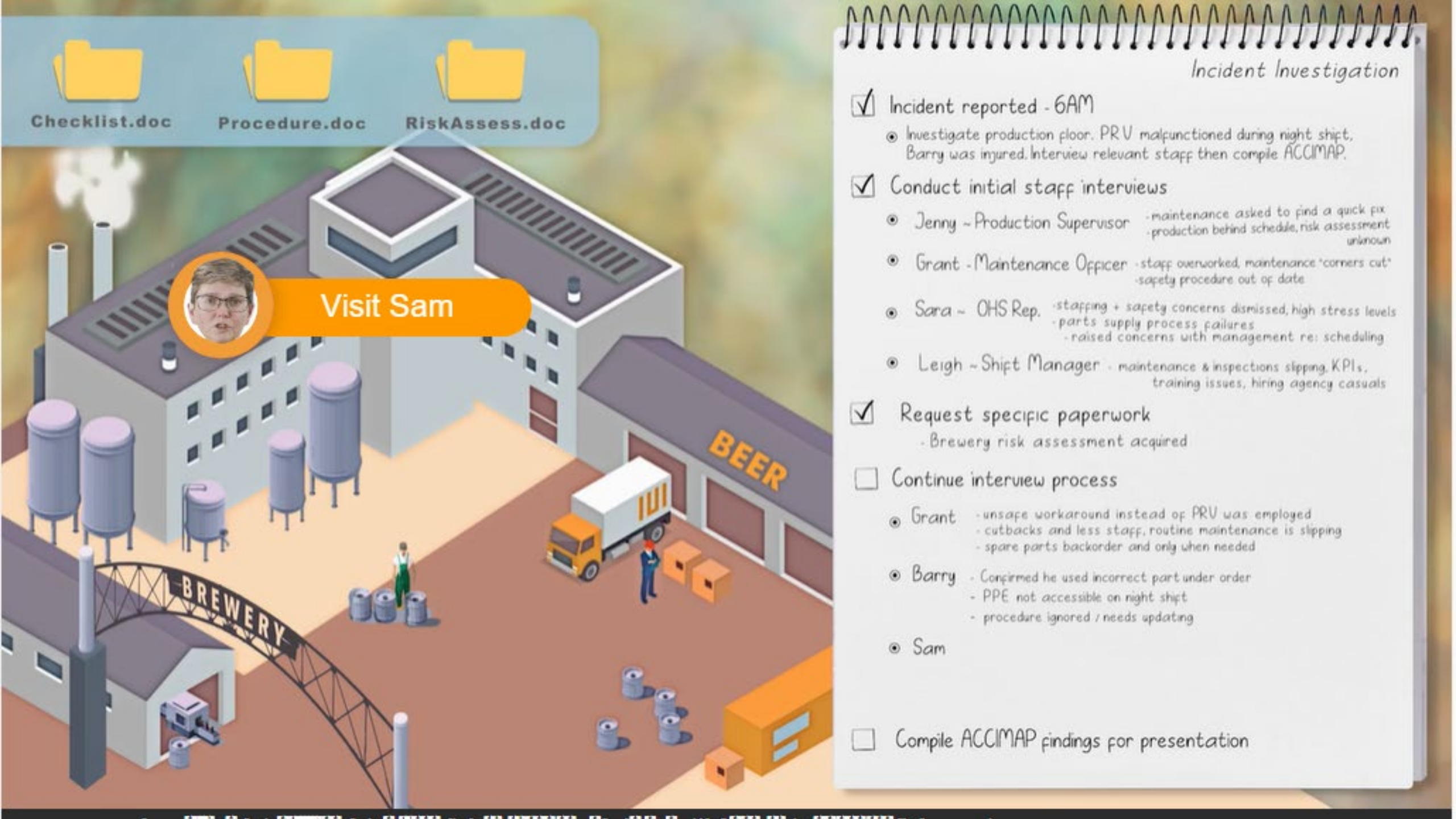
SES
SES
SES
Go here

DANGER
RAT POISON
CAUTION
CAUSTIC
PULL
NOTICE:


Checklist.doc
BEER
Visit Grant
Incident Investigation
Incident reported - 6AM
Investigate production floor. PRV malfunctioned during night shift, Barry was injured. Interview relevant staff then compile ACCIMAP.
Conduct initial staff interviews
Jenny - Production Supervisor
- maintenance asked to find a quick fix
- production behind schedule, risk assessment unknown
Grant - Maintenance Officer
Request specific paperwork
- Brewery risk assessment
Compile ACCIMAP findings for presentation
6:48 / 26:00

find the right people
for the job all the


Procedure.doc
Ask Grant:
Why are there missing sections on the procedure?
I noticed this document is outdated. Are these documents regularly updated?
8:12 / 26:00
CC



Incident Investigation

- [x] Incident reported - 6AM
  - Investigate production floor. PRV malfunctioned during night shift, Barry was injured. Interview relevant staff then compile ACCIMAP.
- [x] Conduct initial staff interviews
  - Jenny ~ Production Supervisor
    - maintenance asked to find a quick fix
    - production behind schedule, risk assessment unknown
  - Grant - Maintenance Officer
    - staff overworked, maintenance "corners cut"
    - safety procedure out of date
  - Sara ~ OHS Rep.
    - staffing + safety concerns dismissed, high stress levels
    - parts supply process failures
    - raised concerns with management re: scheduling
  - Leigh ~ Shift Manager
    - maintenance & inspections slipping, KPIs, training issues, hiring agency casuals
- [x] Request specific paperwork
  - Brewery risk assessment acquired
- [ ] Continue interview process
  - Grant
    - unsafe workaround instead of PRV was employed
    - cutbacks and less staff, routine maintenance is slipping
    - spare parts backorder and only when needed
  - Barry
    - Conçirmed he used incorrect part under order
    - PPE not accessible on night shift
    - procedure ignored / needs updating
  - Sam
- [ ] Compile ACCIMAP findings for presentation

Thank you

Questions?