Design Document: The Jenkins Journey
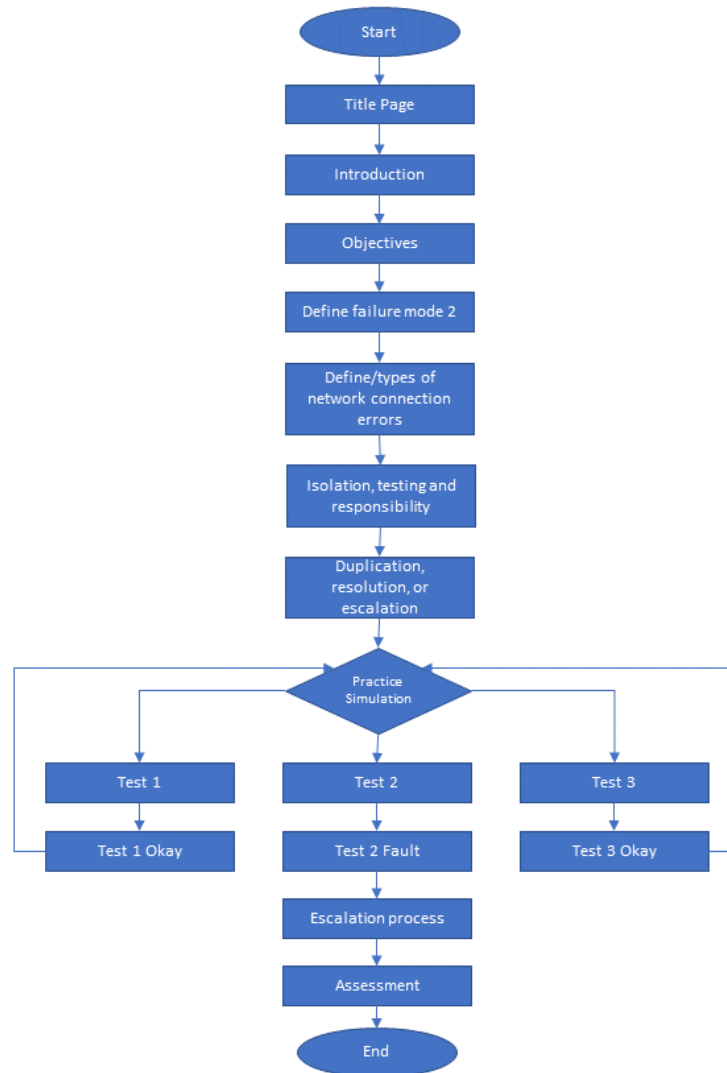
By: **Donna Hryniewicki**

Purpose of the Course	The purpose of this training is to have help desk employees be able to identify the top five failure modes in the JourneyQube CICD pipeline and efficiently address problems as they arise.
Audience Description	The audience for this training is the JourneyQube's DevOps team and manager. Learner characteristics are as follows: - Population of learners is 5 people – 4 men, and 1 woman ranging in age from 24 to 62 - Three people have four-year degrees and two have two-year degrees - All learners have a high level of general technology knowledge - Work experience ranges from 3 months to 40 years, in and out of the IT field 60% of people identify as white, 20% Asian, and 20% Hispanic/Latin American - All learners are fluent in English - All learners will have a familiarity with company standards and practices - All learners are open to the training, knowing that it will make them more efficient
Major Course Objectives (Terminal)	**Terminal Objective 1**: With the aid of supplied documentation, helpdesk employee can verbally summarize the conditions that are most likely to cause each of the top five failure modes in the JourneyQube CICD pipeline. **Terminal Objective 2**: Using the build log, helpdesk employee needs to be able to determine if a given failure matches one of the top five failure modes in the JourneyQube CICD pipeline. **Terminal Objective 3**: Helpdesk employee needs to identify and execute next steps based on the identified failure.

Course Enabling Objectives	**Enabling Objectives for Terminal Objective 1:** Identify the most likely set of conditions that cause failure mode one and resolve those conditions. Identify the most likely set of conditions that cause failure mode two and resolve those conditions. Identify the most likely set of conditions that cause failure mode three and resolve those conditions. Identify the most likely set of conditions that cause failure mode four and resolve those conditions. Identify the most likely set of conditions that cause failure mode five and resolve those conditions. **Enabling Objectives for Terminal Objective 2:** Demonstrate how to access the build log. Using the build log, be able to identify the error that caused a build to fail. Using build log and supplied documentation, determine if the error that caused the failure is one of the top five failure modes in the JourneyQube CICD pipeline. **Enabling Objectives for Terminal Objective 3:** Demonstrate how to escalate the failure if it does not match any of the top five failure modes. If the failure is one of the top five failure modes, using supplied documentation, execute the resolution procedure.
RLO Enabling Objective	The RLO will be from Terminal Objective 1, Enabling Objective 2: Identify the most likely set of conditions that cause failure mode two and resolve those conditions.
Learning Assessment for Course	While a certification will not be offered, there will be a formal assessment at the end of each terminal objective training. Learners will engage in a computer-based assessment involving true/false, pick one, pick multiple, and fill-in-the-blank questions. Learners must achieve an 80% or greater to be considered proficient in each terminal objective.
Learning Assessment for RLO	There will practice exercises in the form of a task simulation and the assessment will be pick one and pick multiple questions.
Instructional Delivery method for Course (overall)	This asynchronous training will be conducted completely online with an optional in person review session. Learners will have two weeks to complete the training, and it will be due the day of the option in person review session.

Instructional Strategy for RLO	Tutorial.
Media	Audio, text, and still images.
508 Accommodations	- Transcripts of all audio - Screen reader - Keyboard navigation option (instead of mouse) - Image descriptors - Any links will be descriptive - Structured headings - High contrast color combinations
Course Structure Description	- There will be three units, one for each terminal objective - There will be one module per enabling objective in each unit - For each unit, there will be an "Introduction" module and a "Conclusion" module. The "Introduction" module will give learners a broad glance at what will be covered in the unit and the "Conclusion" module will restate, in broad terms, what was covered in the unit. - Unit 1 = 7 modules - Unit 2 = 5 modules - Unit 3 = 4 modules
Seat Time of Course	The mean time investment for this training is six hours.
Seat Time of RLO	18 minutes.

RLO Outline	1. Introduction to enabling objective
	2. Learning Objective Statement
	3. Learn
	    a. Define what failure mode 2 is (a network connection error).
	    b. What is a network connection error?
	    c. Types of network connection errors.
	    d. Isolation and responsibility
	        i. Test 1
	        ii. Test 2
	        iii. Test 3
	    e. Resolution
	        i. Cannot duplicate error (Transient)
	        ii. Fix issue if within scope
	            1. Unlocking service account
	            2. Fix code repository permissions
	        iii. Escalate
	    f. Practice
	        i. Task simulation
	    g. Assessment
	        i. Pick one and pick multiple

RLO Flowchart	Pasted below.
Screens/Pages in RLO	39.
Knowledge Checks or Other Assessments or Practices for RLO	2 Dichotomous (T/F, Y/N, etc.) 1 Multiple Choice 1 Multiple Select 1 Other - Simulation Exercise
Rollovers/click events	2 Rollovers 42 Click Events
RLO Navigation	Next, back, menu on demand (learners can go back to a page already covered, but can't skip content not covered), search, hypertext links to supplemental information, location indicator, bookmarks, exit, and help.
Screen Layouts for RLO	See below.
Development Tools for RLO	Articulate Storyline, Audacity, PowerPoint, Photoshop, Word.

Ownership	Donna Hryniewicki, in conjunction with the project SME, will develop the course. JourneyQube will be obsolete by Q3 2023. As a result, maintenance on the course is not expected. If a situation does arise, Donna Hryniewicki has agreed to be available at a set hourly rate. This training is being designed for ABC Company.
Development Time of RLO	40 hours
Support requirements for RLO and course	SME, Articulate Storyline, Audacity, Kdenlive, Open Broadcaster Software, MS Office Suite, Photoshop.
Project Sign-off [optional]	Please sign below indicating agreement with the proposed course plan and approving start-up of the storyboard and development phases.
	Donna Hryniewicki 9/26/2024 Instructional Designer Date
	Project Manager/Sponsor Date

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                    ┌──────────┐
                    │  Start   │
                    └──────────┘
                          │
                    ┌──────────┐
                    │ Title Page │
                    └──────────┘
                          │
                    ┌──────────┐
                    │ Introduction │
                    └──────────┘
                          │
                    ┌──────────┐
                    │ Objectives │
                    └──────────┘
                          │
                    ┌──────────────┐
                    │ Define failure mode 2 │
                    └──────────────┘
                          │
                    ┌──────────────┐
                    │ Define/types of  │
                    │ network connection │
                    │ errors │
                    └──────────────┘
                          │
                    ┌──────────────┐
                    │ Isolation, testing and │
                    │ responsibility │
                    └──────────────┘
                          │
                    ┌──────────────┐
                    │ Duplication, │
                    │ resolution, or │
                    │ escalation │
                    └──────────────┘
                          │
                    ◇ Practice Simulation ◇
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- Practice Simulation → Test 1 → Test 1 Okay
- Practice Simulation → Test 2 → Test 2 Fault → Escalation process → Assessment → End
- Practice Simulation → Test 3 → Test 3 Okay

Menu

Title of Training

(Insert graphic here)

Help

Quit

Menu

Title of slide

(Content)

Help

Quit

Menu

Knowledge Check

(Instructions)

(Question)

Help

Quit