

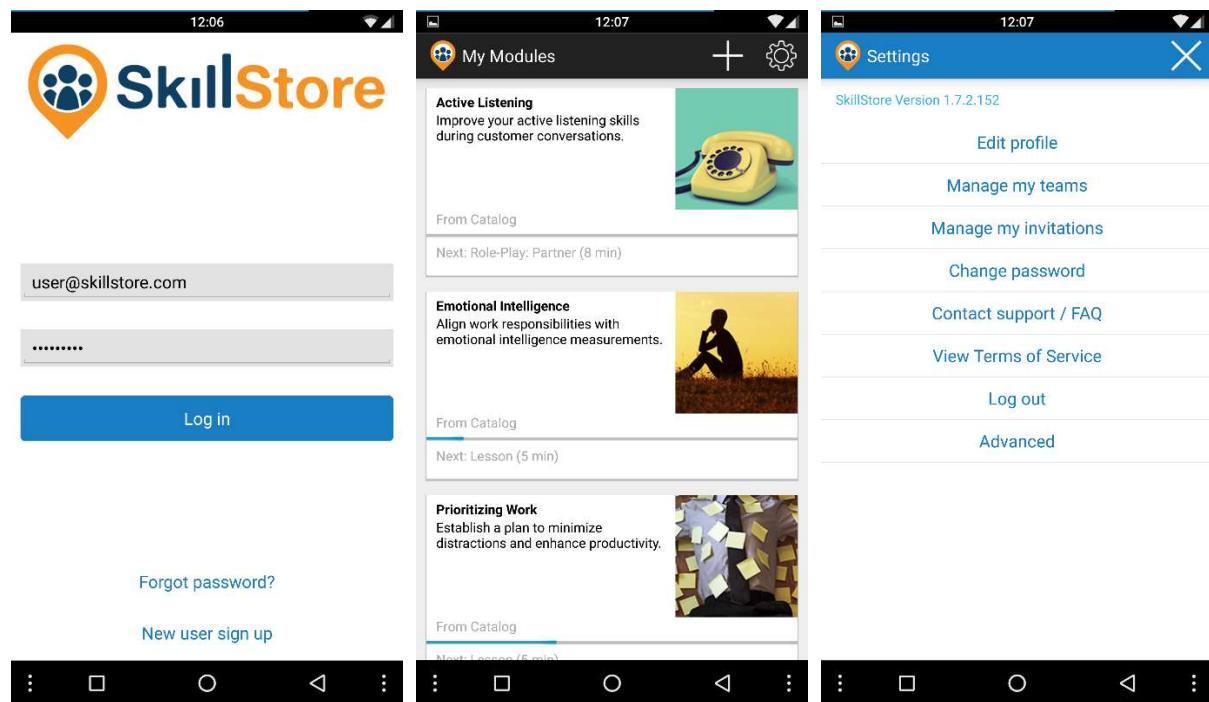
Skillstore Product Overview

The following is an overview of the Skillstore Product. I spent 10 months working for Skillstore, and it's unfortunate that the company has gone under. For intellectual property reasons, I cannot share the Skillstore codebase, but what follows is a walk-through of the product that I worked on, and some descriptions of the work that I did.

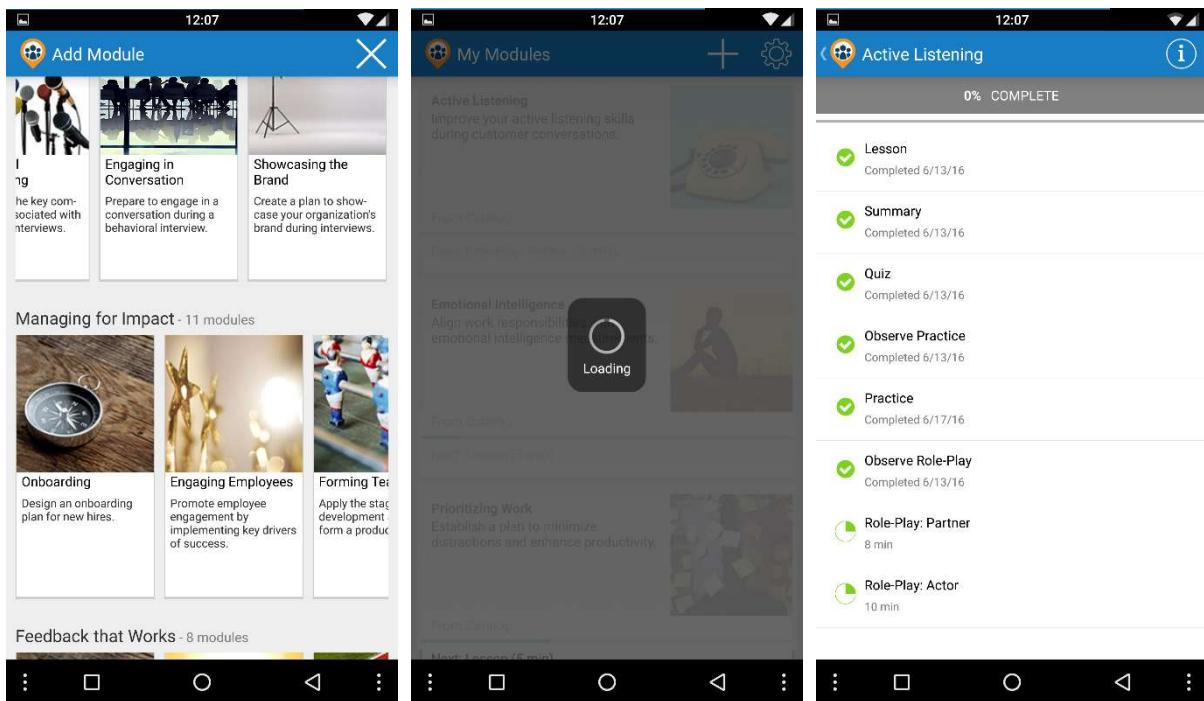
I was originally hired as an Android developer, but that quickly expanded to encompass iOS, and web app work. I'll start with the Xamarin-based mobile app.

Mobile

The Skillstore app was originally written with Xamarin Forms, however after many stability and quality issues, the decision was made to move the app over to the Xamarin native support. I spent much of my time with the mobile app “native-izing” existing views while fixing stability issues, updating features and documenting. “Native-izing” is essentially re-writing pages from scratch for both iOS and Android.

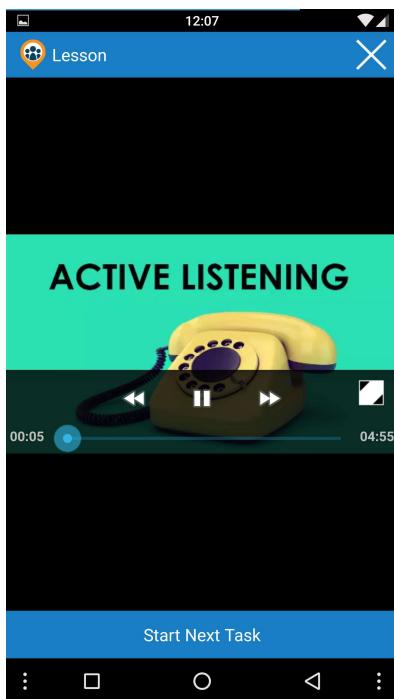


These are the first 3 screens in the app: Login, My Modules, and Settings. (Register/Forgot Password, and Settings pages are all simple and roughly the same.) The highlight here is the center image. I updated the My Modules page to be native, dramatically improving performance by changing the code to asynchronously load costly resources like the module images. This page also supports pull-to-refresh.



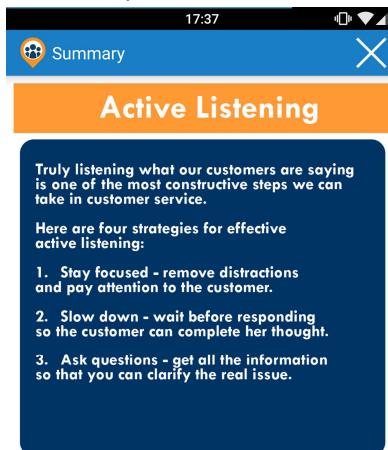
If you hit that plus sign on the My Modules page, the app would take you to the module catalog where the user can add new modules. I also streamlined the image asset loading for the catalog. The picture on the right is the inside of a Module. Modules are broken down into components, each of which is listed below. The module summary page shows the completion status of each component, and has a pull-to-refresh functionality. This module detail screen shot was taken on the dev branch, which was broken by a recent Xamarin Forms update – that's why the completion numbers are broken.

Lesson

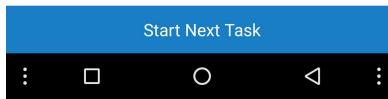


Skillstore was lesson based, where each lesson was a roughly 6min video explaining some aspect of business soft skills. The lesson view was totally re-written from the ground up by myself. The lesson view is Xamarin Native, not Xamarin Forms, and uses a custom video player widget I made to encapsulate video player boiler plate code. On iOS, the video player widget is accompanied by a custom video controls widget, to replace the terrible default iOS video player controls.

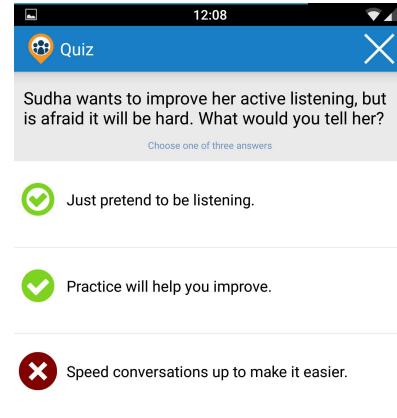
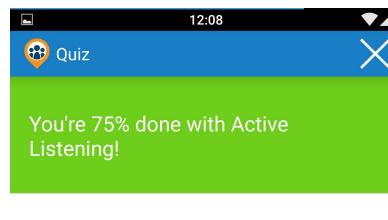
Summary



I also rewrote the summary view from the ground up. This is a view that can display HTML, plain text, or video – depending on what the server hands it.



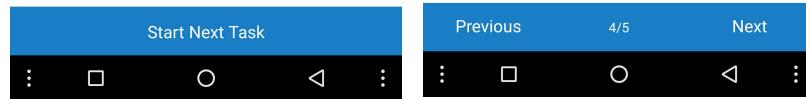
Quiz



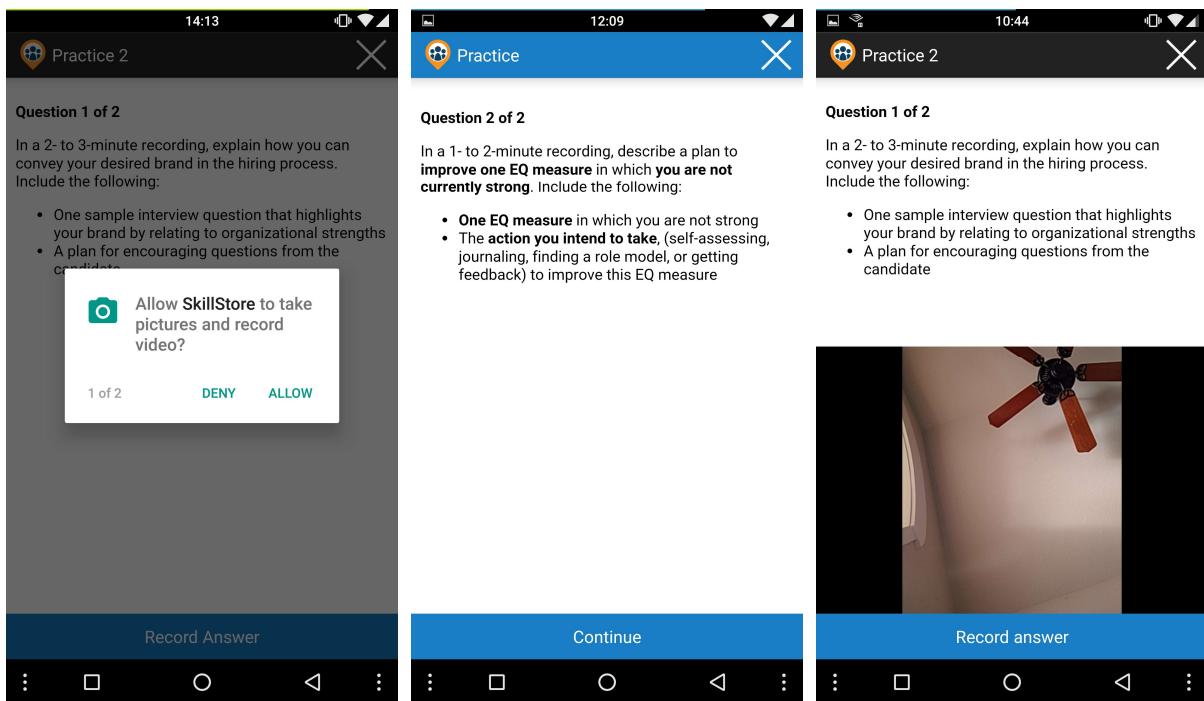
Quizzes are for the learner to quickly check their understanding of a topic. For pedagogical reasons, the quiz gives immediate feedback when the user selects an answer.

I also rewrote the quiz views from the ground up as Xamarin Native views. This involved creating a native Carousel widget to approximate the behavior of the Xamarin Forms carousel.

I particularly like the Carousel I wrote, as it uses reflection to allow a Carousel ViewModel to change the carousel's child views by manipulating a list of child ViewModels. While reflection is generally a no-no, this keeps the views clean, and only concerned with presentation. The ViewModels should manage the actual view logic.



Practice



Practice is where a lot of the value of Skillstore was to be found. The idea was that the learner would see some prompt, record a response to that prompt, and get feedback from other users on that recording. This is in following with the architecture of Massive Open Online Courses, where students are leveraged as graders thus resolving the scalability problem of a single professor. Practices are inside a carousel, and can have multiple parts before submission to peer review.

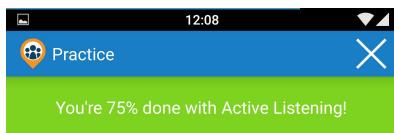
In this first practice screen shot, you can see the very first commit I ever made at Skillstore: it was adding support for the Android 6.0 permissions system. This was a bit of an unusual task, as the Android permissions system relies on callbacks in the main Activity; however, Xamarin Forms apps sit in a single Activity and abstract out most of the Android system which mucked up the whole affair. I ended up using a semaphore system to handle in progress permissions requests.

Picture number two shows a prompt for the user, and picture number three is what video capturing looks like. Recording is managed by that single button along the bottom.

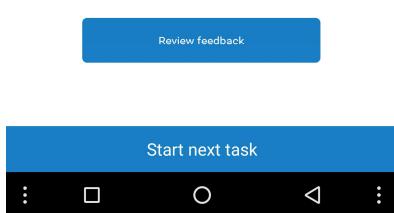
The image shows three screenshots of a mobile application interface, likely from an Android device, illustrating a video recording and review process.

- Screenshot 1:** Shows a video frame of a man's face. Below it is a blue button labeled "End Recording". At the bottom are standard Android navigation icons: three dots, a square, a circle, a triangle-left, and a triangle-right.
- Screenshot 2:** Shows a black screen with a large play button in the center. Below it are buttons for "Previous", "1/2", and "Next". At the bottom are standard Android navigation icons.
- Screenshot 3:** Shows a video frame of a man wearing headphones. A playback control bar is overlaid at the bottom, showing a progress slider from 00:01 to 00:38, a double arrow icon, a pause icon, and a single arrow icon. Below the video are buttons for "1/1" and "Next", followed by standard Android navigation icons.

Here you see me in the middle of a recording in the picture on the left. After the user has made a recording, they can obviously review the recording. The recording review leverages the same video player widget that I made earlier.



In fact, this is another view where I tossed a bunch of code and rewrote everything from scratch. The original code was a massive, comment-less state machine, which I refactored down into a much more reliable, faster, and simpler state machine spread across more files with many comments.



And of course, when the user has received feedback, they'll want to see it. That blue button appears when the user has feedback. The feedback looks like it does in role play – which looks a lot like quiz.

Observe Practice

In a 1- to 2-minute recording, **describe your typical situation** during a customer conversation. Include the following:

- An **explanation of a distraction** that typically occurs during calls (e.g., using your phone)
- A **solution** connected to the distraction (e.g., putting your phone away)
- A description of **how you can stay focused** (e.g., putting yourself in the customer's shoes)

In a 1- to 2-minute recording, **describe your typical situation** during a customer conversation. Include the following:

- An **explanation of a distraction** that typically occurs during calls (e.g., using your phone)
- A **solution** connected to the distraction (e.g., putting your phone away)
- A description of **how you can stay focused** (e.g., putting yourself in the customer's shoes)

Question 1 of 2

In a 2- to 3-minute recording, describe the brand you want to highlight during the hiring process. Include the following:

- A reflection on the strengths of your work environment
- One of your organization's or employees' greatest achievements

Here you can see what it looks like to observe someone else's practice. Each practice question is presented as a carousel page, and a video player plays the video. At the end is essentially a quiz for the user to fill out what they thought of the practice. There is also an option to report a practice unreviewable. I set the unreviewable practice logic to reset the component, and kick the user back up to

Why was the video unreviewable?

- Video quality was inadequate
- Video did not have useful content
- Video included inappropriate content

To what extent does the learner describe how s/he will stay focused?

Choose one of three answers

- The learner explains how s/he will stay focused during the call.
- The learner states that s/he will stay focused, but needs to describe how.
- The learner does not mention staying focused during the call.

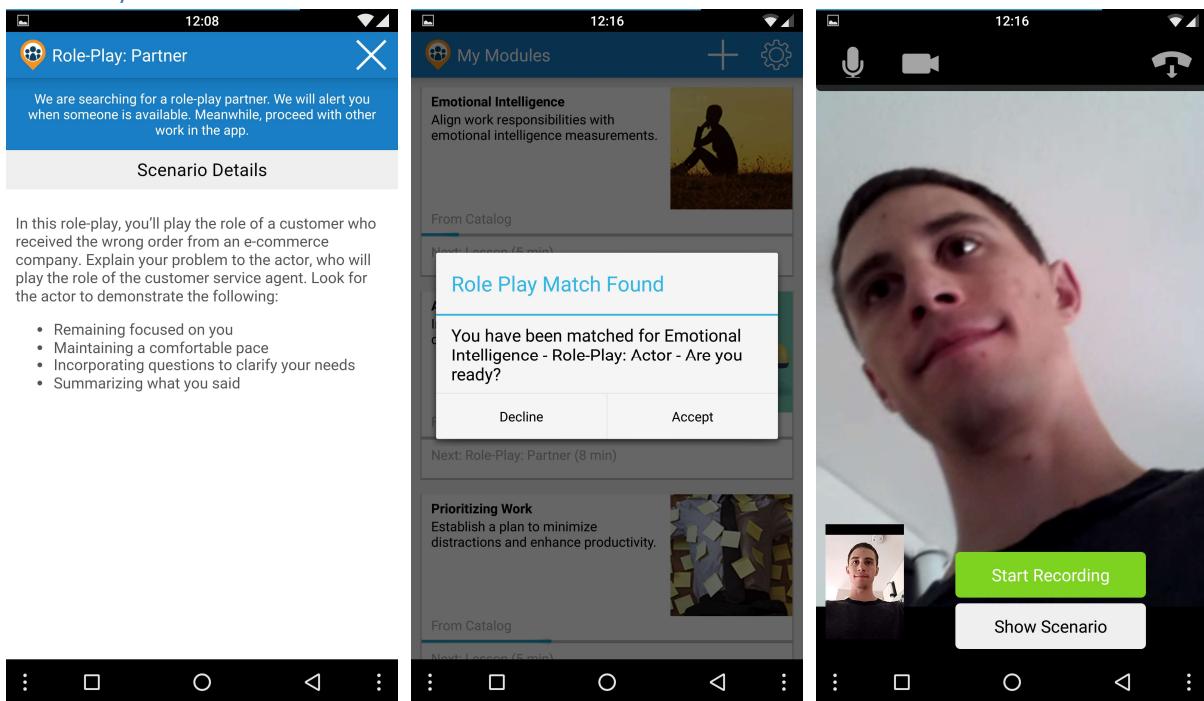
the Module Overview view. Like practice, Observe Practice was largely redone to use Native Xamarin by yours truly.

Continue reviewing practice

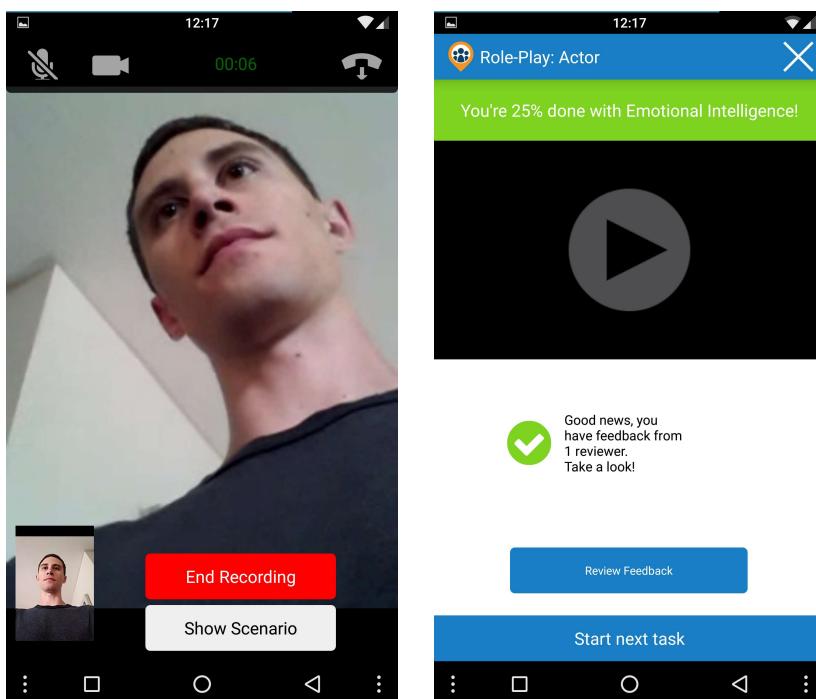
Submit reason

Previous 3/3 Next

Role Play



The other big attraction for Skillstore was interactive role play. The basic concept is that users in a module would be matched for role play (only once they'd said they were ready), and then they would enter into a video conference with another person. In the conference, they would act out the scenario presented in the component. This was not an area that I did much work in on the mobile app; however, I



did several months' work with the web app version of interactive role play.

Observe Role Play

The image shows two screenshots of a mobile application interface. The left screenshot, titled 'Observe Role-Play' at 12:09, displays 'Scenario Details' with a list of items to look for during the role-play. The right screenshot, titled 'Role-Play: Actor' at 12:17, shows a question about the actor's tone and three response options with green checkmarks.

In this role-play, the actor will serve as a manager who is letting an employee, played by the partner, know that s/he will not receive a promotion, despite his/her hard work. Look for the following:

- Calm, caring tone
- Statements about the employee's emotions
- Validation of the employee's emotions
- Thoughtful, considerate language

To what extent does the actor maintain a calm and caring tone?

The actor maintains a calm, caring tone throughout the role-play.

The actor has somewhat of a calm, caring tone, but should be more consistent.

The actor does not have a calm, caring tone.



As with practice, users would review other role plays. The two separate video feeds would appear side-by-side in the video player, and then the user would fill out a little quiz afterward.

Web App

The image displays three screenshots of the SkillStore web application, showing the login screen, the 'My Modules' dashboard, and a detailed view of a module.

Login Screen: Shows the SkillStore logo and 'Learn by Doing' tagline. A form for Email (klask@skillstore.com) and Password (redacted) is present, along with a 'Log In' button, 'Forgot your password?' link, and 'Sign Up for SkillStore' link.

My Modules Dashboard: Shows the user 'DaJo26 - RP-Dev'. It features a grid of modules: 'Emotional Intelligence' (Next, Lesson | 5 min, 1 / 8), 'Active Listening' (Next, Lesson | 8 min, 2 / 8), 'Skillstore - Catalog' (Interview Questions, Storytelling, Leading Virtual Teams, Requesting Feedback, Recognizing Bias, Active Listening, Onboarding, Emotional Intelligence), and a progress bar for the catalog (1 / 8). Navigation links for mobile apps and download icons for App Store and Google Play are at the bottom.

Module Detail View: Shows the 'Recognizing Bias' module. It includes a summary icon, a progress indicator (0 / 5 components complete), a brief description about interview accuracy, and a 'Watch the Lesson' button. To the left is a sidebar with module components: Module Overview, Lesson (7 min), Summary (1 min), Quiz (5 min), Observe Practice (3 min), and Practice (7 min).

Above are a few screenshots of the web app. With the changes I was working on just before Skillstore went under, the web app reached parity with the mobile app. Now every feature in the mobile app was also in the web app.

Lesson

The screenshot shows the SkillStore web interface. At the top left is the logo 'SkillStore Learn by Doing'. Below it is a navigation bar with a back arrow and the text 'My Modules'. On the left side, there's a sidebar with icons for 'Module Overview', 'Lesson In Progress' (which is highlighted in orange), 'Summary 1 min', 'Quiz 5 min', 'Observe Practice 5 min', and 'Practice 7 min'. The main content area is titled 'Lesson' and features a video player. The video thumbnail shows a hand pointing at a chalkboard with the word 'RECOGNIZING' written on it, surrounded by small human figures. Below the video player is a 'Continue' button. At the bottom of the page, there's a note 'Check out our mobile apps' followed by links for the App Store and Google Play.

Lesson worked the same way as in the mobile app.

Summary

The screenshot shows the SkillStore web interface. At the top left is the logo 'SkillStore Learn by Doing'. Below it is a navigation bar with a back arrow and the text 'My Modules'. On the left side, there's a sidebar with icons for 'Module Overview', 'Lesson In Progress' (which is highlighted in orange), 'Summary Completed a few seconds ago' (with a checkmark icon), 'Quiz 5 min', 'Observe Practice 5 min', and 'Practice 7 min'. The main content area is titled 'Summary' and features a section titled 'Recognizing Bias'. This section contains text about hidden biases and a list of seven effects: 1. Halo Effect, 2. Horns Effect, 3. Contrast Effect, 4. People-Like-Me Effect, 5. Leniency Effect, 6. Strictness Effect, and 7. Central Tendency Effect. Below this text is a note: 'By being alert to the different forms of bias, you can bring your attention back to what really matters: the candidate's fit for the job'. At the bottom of the page, there's a 'Watch the Lesson' button and a note 'Check out our mobile apps' followed by links for the App Store and Google Play.

Summary was also the same as in the mobile app.

Quiz

The screenshot shows the 'Quiz' section of the SkillStore web app. At the top, there's a navigation bar with the SkillStore logo and a 'My Modules' button. Below the navigation, the title 'Recognizing Bias' is displayed, followed by the subtitle 'Practice recognizing and responding to bias during interviews.' On the left, a sidebar lists various modules: 'Module Overview' (orange), 'Lesson In Progress' (orange), 'Summary Completed a few seconds ago' (green), 'Quiz In Progress' (blue), 'Observe Practice 5 min' (orange), and 'Practice 7 min' (orange). The main content area is titled 'Quiz - Question 1 / 5'. A scenario is presented: 'Sanja's colleague wants to hire a candidate because of a good "gut instinct." What should Sanja do?'. Below the scenario are three options: 'Talk with the colleague to see what factors caused the good "gut instinct"', 'Examine his own gut instinct on the candidate to see if it aligns with his colleague's', and 'Trust his colleague's instinct and recommend that the candidate is hired.' The first option is selected. A feedback message says 'Incorrect.' with a crossed-out circle icon. A 'Next' button is at the bottom right. At the very bottom of the page, there are links to download the mobile app from the App Store and Google Play.

Quiz worked the same as in the mobile app.

Interestingly, here was where a feature moved from web to mobile – the web app debuted the instant quiz feedback feature, which I later brought to the mobile app.

Practice

The screenshot shows the 'Practice' section of the SkillStore web app. The layout is similar to the Quiz section, with a sidebar on the left and main content on the right. The sidebar includes 'Module Overview' (orange), 'Lesson In Progress' (orange), 'Summary Completed 2 minutes ago' (green), 'Quiz In Progress' (blue), 'Observe Practice In Progress' (orange), and 'Practice In Progress' (orange). The main content area is titled 'Practice' and shows 'Question 1 of 2'. It contains a scenario: 'Read the scenario below, identify the bias the person is observing, and generate an appropriate response. Include the following in a 1-to 2-minute recording:'. Below the scenario is a list of steps: 'The type of bias observed', 'Evidence supporting the presence of the named bias', and 'Steps you would take to mitigate the bias'. To the right of the text is a video camera icon. A note at the bottom states: 'While reviewing ratings of candidates, Justine is distressed that no one earned ratings above "Adequate."'. At the bottom are 'Continue' and 'Next' buttons. Like the Quiz section, it includes download links for mobile apps at the bottom.

Practice in the web app was very similar to the mobile app version. Very recently, however, I completely re-architected the practice code to reuse new code written for the interactive role play features.

Active Listening

Improve your active listening skills during customer conversations.

Module Overview

Lesson 6 min

Summary 1 min

Quiz 5 min

Observe Practice 5 min

Practice In Progress

Observe Role-Play 5 min

Role-Play: Partner Completed 4 days ago

Role-Play: Actor Completed 4 days ago

In a 1- to 2-minute recording, describe your typical situation during a customer conversation. Include the following:

- An explanation of a distraction that typically occurs during calls (e.g., using your phone)
- A solution connected to the distraction (e.g., putting your phone away)
- A description of how you can stay focused (e.g., putting yourself in the customer's shoes)

Re-Record Share

Here you can see playback post-recording. At the time of these screenshots, parts of the web app were already down as Skillstore was being disassembled. I unfortunately couldn't get a screenshot of recording or role play.

Emotional Intelligence

Align work responsibilities with emotional intelligence measurements.

Module Overview

Lesson 5 min

Summary 1 min

Quiz 5 min

Observe Practice 5 min

Practice In Progress

Observe Role-Play 5 min

Role-Play: Actor In Progress

Role-Play: Partner 6 min

In a 2- to 3- minute recording, meet with an employee (the partner) who was not selected for a promotion. You'll have to use empathy while explaining why you chose a different employee for a manager role. Include the following:

- Calm, caring tone
- Statements about the employee's emotions
- Validation of the employee's emotions
- Thoughtful, considerate language

We are searching for a role-play partner. We will alert you when someone is available. Meanwhile, proceed with other work in the app.

Watch the Lesson

Here you can see one of the role play screens. This is pre-match messaging. As role play didn't work, I couldn't get screenshots of the rest. Role play looked about the same as practice, with a second person's feed included – the classic two box video conferencing look.

Role play was a lot of work to bring to fruition. It was many times more complicated than individual practice.

Team Admin

AMOC Test Org My Modules Log Out

Skillstore for Teams

Spread the SkillStore word across your organization. Think of others in your organization that would love the opportunity to practice people skills. Add teams, modules, and extend your invites now!

-- Select an organization to manage --

Land here by mistake? For Learners, SkillStore is designed to work on your mobile device. Go to your device to start practicing. Need the app?

[Download on the App Store](#) [Get it on Google play](#)

Team Admin was made to help clients manage their teams of learners. It offered many reporting tools, and various other team-forming tools. Had Skillstore not shut down, Team Admin was next on the list for a big overhaul.

Dajo26 My Modules Log Out

My Teams

Organization Name Dajo26

This is your company or community name. This name will show up on invitations and modules that you share with your teams.

Teams

Team Name	Description	Action
Demo	5 modules, 2 members, 0 pending invites	X
RP-Dev	2 modules, 10 members, 0 pending invites	X

Create a New Team

Dajo26 My Modules Log Out

My Teams ▶ RP-Dev

Team Name RP-Dev

Modules 2 modules

Members 10 members, 0 pending invitations

Executive Sponsor ✓

Optional. If specified, all invitations will mention this Executive. Otherwise they will mention the Organization. E.g. Peyton Manning invited you...OR Denver Broncos invited you...

Dashboard Add a Module Invite Members

Dajo26 My Modules Log Out

My Teams ▶ RP-Dev ▶ Dashboard

Dashboard

Your Team Stats

Team	Modules	Learners	Invitations Accepted	Engaged Learners	Modules In Progress	Modules Completed	Practice Videos
RP-Dev	2	10	100%	1%	45%	5%	9

Module Completion Trend Last Week

Date	Total	In Progress	Completed
Jun 24	15	1	1
Jun 25	17	2	1
Jun 26	18	3	1
Jun 27	19	4	1
Jun 28	19	5	1
Jun 29	19	6	1
Jun 30	19	7	1

Leaderboard

Name	Score	Completed	Last Update
tester5 tester	100	1	6/28/2016
tester4 tester	58	0	6/28/2016
Kellen Lask	40	0	7/1/2016
Da Jo	25	0	6/27/2016
David Johnson	5	0	6/27/2016
tester1 tester	5	0	7/1/2016
Ann Marie O'Connor	0	0	6/29/2016
Stephen Van Gordon	0	0	6/24/2016
tester2 tester	0	0	6/29/2016
tester3 tester	0	0	6/8/2016

Team admin was the last thing I was working on before Skillstore decided to close down. The morning I found out, I was actually talking with a co-worker about how to make that top orange box in the dashboard look less awkward. Then, as 9:00am rolled around, we went to have stand up, and Srikant Vasan, the CEO, delivered the bad news. I then reset my mac, helped pack the office up, and left.

On the dashboard there, I created the Leaderboard, and totally refactored the Module Completion Trend chart. The Leaderboard, when given a large enough team, converted into a leader/laggard board. The Module Completion chart gave various filters, and displayed data points on mouse-over.