Trainer Reference Manual:

Guide to Simplilearn Pedagogy, LMS Structure, and Training Delivery
Plan for MEAN Stack Developer Course

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Objective

The trainer reference guide is a ready reckoner on Simplilearn standards and methods of course delivery, LMS structure, terminologies, and detailed information on course materials. The document provides the trainer with an overview of the learning path and curriculum of the MEAN Stack Developer Course.

Description

This document provides a walkthrough of the LMS, highlights its components, with a detailed description of the learning materials, including hands-on practices, projects and assessments, and guidelines for ensuring engaging, outcome-centric learning.

At Simplilearn, we focus on high engagement, outcome-centric learning. Our learning pedagogy aims to provide the most effective learning experience for the learners to enable course completion. The trainer plays a crucial role in achieving this goal. A set of guidelines are provided to the trainers to help them enable the learners to maximize their learning outcomes through the various resources provided by Simplilearn.

The trainer is provided with a detailed plan to deliver the content per the defined learning path and a comprehensive view of the curriculum to depict the skills and knowledge covered in each phase.

LMS Components

This section provides a walkthrough of the LMS structure, its components, and the terminologies.
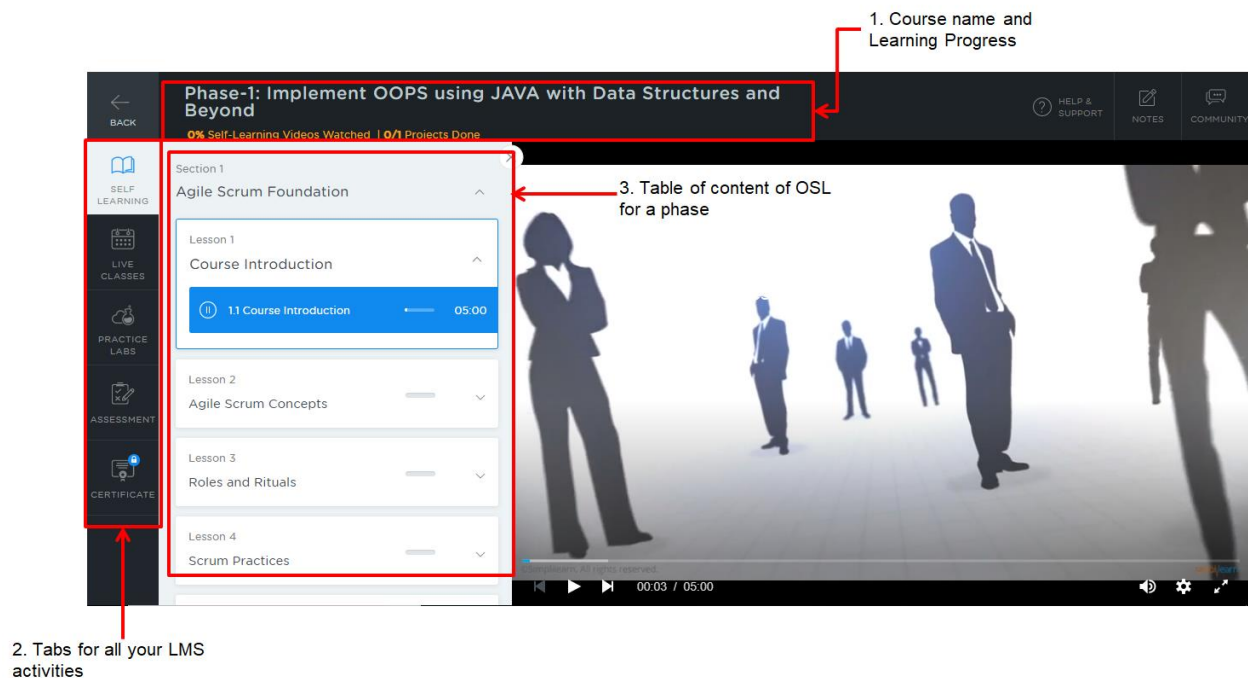

Image 1

1. The taskbar shows the name of the course and the learning progress.
2. The tabs provide information on:
   - Table of Content (ToC) of the Online Self-learning (OSL) videos
   - Schedule and details of the Live classes
   - Description of the labs where the learners get a hands-on experience of the concepts covered
   - Details of the projects and assessments that the learners should complete
   - Course completion criteria
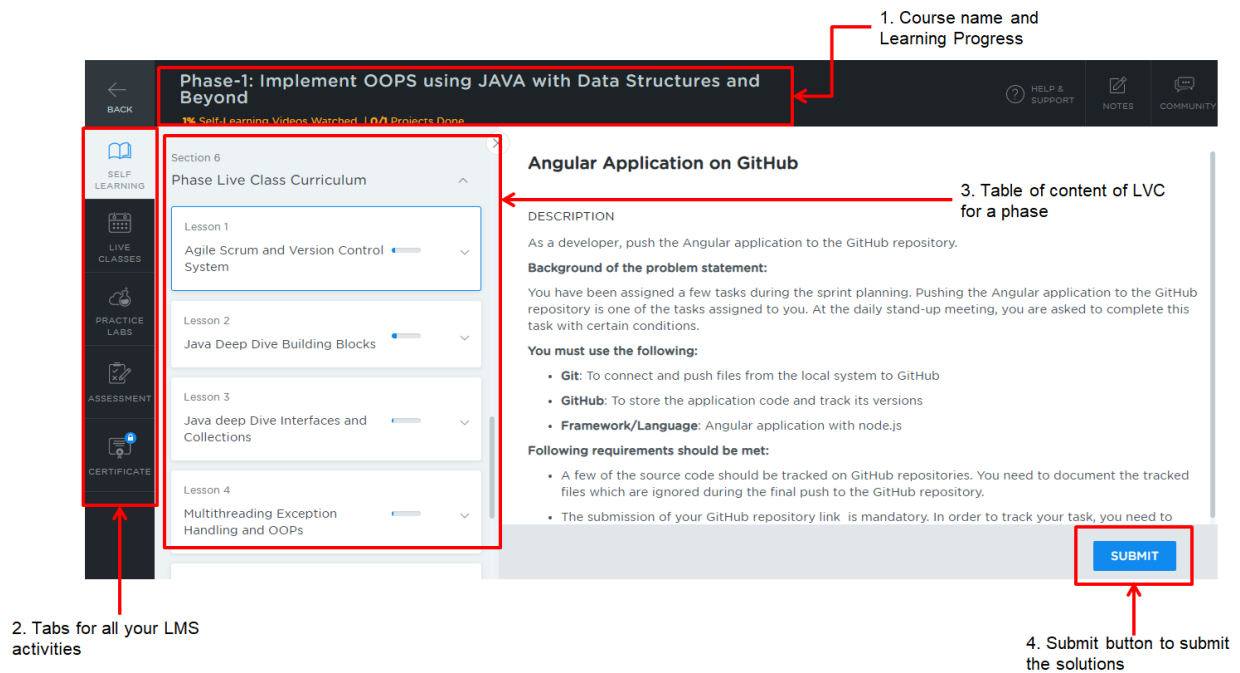   - Downloadable certificate after the learner satisfies the required criteria

Image 2

1. Name of the course and learning progress
2. Tabs for various activities
3. ToC of LVC
4. Submit button for project solution

Learning materials and hands-on activities

Presentation/PPT	The course content is provided in PowerPoint presentations that are accessible only to the trainers. Every PPT slide includes **trainer notes** that provide cues on what needs to be covered in that slide. The presentation includes learning objectives for the course and each lesson, slides covering various topics, assisted and unassisted practices, problem statements and guidelines on solving them, key takeaways of the lessons, MCQ-based knowledge checks, and lesson-end projects.
Assisted Practice/Practice Project/Demo	These are a demonstration of the concepts by the trainer. One or more slides in every presentation/lesson will include a problem statement, followed by the corresponding solution steps in the next slide. Based on the requirements, a supporting document will be available for download.
Unassisted Practice	These are the hands-on exercises expected to be performed by the learners under the trainers' guidance. One or more slides in every presentation/lesson will include a problem statement, followed by the corresponding solution steps in the next slide. Based on the requirements, a supporting document will be available for download.
Knowledge Checks	These are the multiple-choice questions (MCQs) available in the presentation to check the learners' knowledge based on the concepts taught in that class. Knowledge checks are available in the **Table of Contents** as shown in **point 2.**
Lesson-End Project	This is a scenario-based project that the learners must complete under the trainers' guidance. The difficulty level of these projects is higher than the assisted or unassisted practices. Lesson-end projects are non-gradable and must be submitted for evaluation and feedback from our **in-house experts/Teaching Assistants**. However, the grades earned in these projects are not considered for the **Course Completion Criteria.**
Phase-end Project	This is a scenario-based project that the learners must complete under the trainers' guidance. The difficulty level of this component is higher than the lesson-end projects. Phase-end projects are gradable and the completion of these projects is mandatory to proceed with the program. The details of phase-end projects are available in the TOC. This component is available in the **Assessment Tab** as shown in **point 2.**

Guidelines for providing outcome-centric, high-engagement learning

- While explaining a concept, the trainer is recommended to use slides to enhance the learning experience.
- Every slide in the presentation should be treated as important and shouldn't be skipped or overlooked.
- The flow of learning is designed after thorough research and must be strictly followed. Any feedback on the content or the flow of the lesson can be shared privately with the course's Teaching Assistants.
- Every class should start with a recap of the concepts covered in the previous class(es), followed by the concepts that will be covered on that day, and then a Q&A at the end of the class. The trainer is encouraged to add value to a concept based on their experience and/or knowledge.
- Promoting the surveys during the session is as important as it is at the end of the lesson. Surveys help in analyzing the learners' understanding, trainer's engagement with the learners, delivery of content, and the assistance provided by the Teaching Assistants during online and offline classes.
- Any escalation or learner misbehavior should be reported immediately to the Teaching Assistants available.
- Simplilearn believes faculty is one of the most important pillars in any course delivery. All the information needed to deliver the course is provided to the trainers. For any further details or assistance, contact the Teaching Assistants for the course.
- The provided resources - mobile app, course components, community forum, and LMS access enable hassle-free learning. Trainers should guide and encourage the learners to effectively use these resources for completing the course.
- The community forum on the LMS help learners interact with one another, and with trainers and Teaching Assistants. At the end of every class, trainers can encourage the learners to use our community forums.

Simplilearn's pedagogy

We have defined a pedagogy to deliver the best learning experience to our learners. The teaching methodology is tailored as per the requirement of the course. It is important that the trainers familiarize themselves with this model to guide learners effectively.

Training delivery plan for MEAN Stack Developer Course

In this course, we follow the blended learning approach, where self-paced high-quality videos (OSLs) are provided to the learners to learn or revise the basics of the technology or frameworks, and the practical implementations are conducted during live virtual classes.

This course has 4 sets of Live Virtual Classes and more than 10 OSLs. The sequential flow and other information about the course are provided below:

- **The Learning Path and the Projects:** This provides details of the learning flow and the projects available for the learners.
- **Day-wise Agenda:** This sheet will provide a day-wise agenda for every set of live virtual classes. The day-wise agenda helps the trainers and the learners know which topics or lessons will be conducted each day.
- **Course Materials:** The course materials are shared with the trainer, and include:
  - Presentations
  - Practices: Assisted, Unassisted documents, and lesson-end projects
  - Phase-end projects and its related documents
  - The learning design
  - The learning path and the projects

After detailing the course components and standards, let's understand the flow of the program:

- The learning design of the day helps in understanding and planning the delivery of the slides, practices, and Q&A. It also helps the trainer manage time for the delivery.
- As soon as the session begins, the trainer must recap all the important concepts from the previous session before starting the presentation. If it is the beginning of the lesson, follow the sequence mentioned below:
  - **You Already Know** - The **You Already Know** slide, in the beginning, sets the expectation of the skills that the learners should be aware of before starting the training. The skills mentioned in this slide are important to understand the concepts that will be taught during the training. Trainers are advised to ensure that the learners are equipped with the skills mentioned at the beginning of the lesson.
  - **Recap** – The recap slide(s) provides a summary of the concepts learned in the earlier class(es). The trainer can spend 15 mins on the slide(s) covering the important concepts, followed by a short Q&A session to clarify the doubts.
  - **A Day in the Life of a MEAN Stack Developer** - If the learners are already aware of the skill set, the next slide will be the project scenario (**A Day in the Life of a MEAN Stack Developer**), where the trainer explains how the training for the day will help them solve the project requirement. Here, the learners must be informed that this training is project-driven, where the concepts learned will be implemented in the project.
  - **Learning Objectives** - This slide gives a gist of the concepts that will be covered from the day's training.
  - The subsequent slides will have the trainer notes, to help the trainer explain the slide as instructed. As trainers prepare for the class(es) in advance, these instructions are just an aid and need not be readout.
  - **Assisted Practice** - After covering certain concepts, the **Assisted Practice** slide helps the trainer guide the learners across a Word document with instructions to solve the given problem statement using the skills or concepts learned so far.
  - **Unassisted Practice** – On covering the remaining concepts after the assisted practice, the **Unassisted Practice** slide has a problem statement for the learners to solve without any trainer assistance. However, the trainers can direct the learners if any issues are found during the exercise.

- Towards the end of the presentation/lesson, after the remaining concepts are covered, trainers must ensure that **Key Takeaways** are met as expected, followed by the **Knowledge Checks.**
- **Lesson-end project -** Since the learners are promised project-driven learning, the trainers are required to explain the **Lesson-end project** slide in the class. Trainers must notify the learners that they will be assisted wherever required within the stipulated time. Link the problem statement with the project scenario (**A Day in the Life of a MEAN Stack Developer**) discussed earlier.
- **Before the Next Class** – Lastly, before concluding the session, the **Before the Next Class** slide sets the expectations of the skills that the learners have to familiarize themselves with before attending the next session. Learners can use the OSLs to prepare for the next class.

- **Q&A** - Before concluding the session, conduct a quick **Q&A** to gather learners' inputs on the trainer's improvement areas, for improving the effectiveness of the training. Request the learners to fill out the survey on the following parameters:
    - How the trainer conducted the session and their knowledge level.
    - How the platform WebEx helped them during the training.
    - How the content is built and organized.
    - How the presence of teaching assistants made a difference.
- The trainer will receive the feedback and comments within 24 hours of the session.
- The trainer can continue following this approach throughout the training program if their NPS (Net Promoter Score) increases after the session.

Curriculum

This section elucidates the sequential flow of skills learners are expected to have before attending a live virtual class (List of OSLs).

Phase-1 OSL: Get started with web development		Skills Covered
Course 1	Agile Scrum Foundation	Basics of Agile and Scrum
Course 2	Git	Basic Git Operations
Course 3	A Front-End Web Developer MasterClass Using HTML, CSS, and JavaScript	Basics of HTML, CSS, and JavaScript

Phase-1 LVC: Get started with web development

Phase-2 OSL: Create websites using Front and Back-end frameworks		Skills Covered
Course 1	An Introduction to TypeScript	Basics of TypeScript
Course 2	Hands-On TypeScript 3 and Angular 7 for Web Development	Basics of TypeScript 3 and Angular 7
Course 3	Design Patterns in TypeScript	Design Patterns used in typeScript
Course 4	Angular Training	Basics of Angular
Course 5	Learn to Build Progressive Web Apps Using JavaScript	Creating PWA Applications
Course 6	Node.js Absolute Beginners Guide – Learn Node from Scratch	Basics of Node.js

Phase-2 LVC: Create websites using Front and Back-end frameworks

Phase-3 OSL: Database Connectivity and Management		Skills Covered
Course 1	RESTful API Design with Node, Express, and MongoDB	Building RESTful API using Node, Express, and MongoDB

Phase-3 LVC: Database Connectivity and Management

Phase-4 OSL: Testing the Application and DevOps		Skills Covered
Course 1	Hands-On Full-Stack Web Development with GraphQL and React	Basics of GraphQL
Course 2	Docker for the Absolute Beginner Hands-On	Docker and Jenkins Integration
Course 3	Develop and Deploy Modern Web Applications with Docker	Docker basics commands
Course 4	Learning ELK Stack 6.0	ELK stack and Kibana monitoring tool
Course 5	Introduction to AWS	EC@ and CloudFront

Phase-4 LVC: Testing the Application and DevOps

Total OSL Duration: 70 hrs

Total LVC Duration: 150 hrs

Dos and Don'ts:

- **Dos:**
  - Start every session on time, and with a recap.
  - Encourage learners to ask more questions for a better understanding of the concepts.
  - Share the industry implementations of the concepts taught in every class.
  - Focus more on covering all the concepts and schedule a quick Q&A session at equal intervals.
  - Use the community forum to interact offline with the learners.
  - Encourage the use of Simplilearn's content, platforms, and mobile applications.
  - Encourage learners to practice assignments and go through the OSL videos before attending the next sessions.
  - Encourage learners to participate in surveys.
  - Any session extension related information should be shared with GTA first before announcing in the session. Unless confirmed by Simplilearn, the trainers should not discuss with the learners about session extension/cancellation.
  - Use "Epic Pen" for explaining the concepts.
  - If any reference materials need to be shared, it must be vetted by the GTAs first and should be shared through a dedicated Simplilearn drive or dedicated community thread for that batch.
  - Encourage the learners to reach out to Simplilearn support team for any support apart from the community threads.
  - Trainer must provide enough time for a dry run in order to be well prepared to take the live class sessions.

- **Don'ts:**
  - Focusing more on answering the questions over covering the concepts.
  - Overlooking the slides or skipping the hands-on.
  - Deviating from the suggested flow and tailoring it per the needs.
  - Pushing the concepts to cover in the next sessions.
  - Extending the classes for more than 4 and a half hours.
  - Promoting third-party vendors or resources of external bodies.
  - Sharing contact details with the learners (Email ID/LinkedIn ID/Phone Number)
  - Using external content in the Live Class sessions unless pre-approved by Simplilearn.

FAQs:

I have queries regarding the content, whom should I contact?

You can reach out to your teaching assistant to share your feedback and views.

Who is my teaching assistant?

Teaching assistants are technical personnel who are the point of contact for all course-related issues and feedback. They actively take part in delivering the best experience to our learners by helping them and trainers during the live virtual classes.

How do I contact my teaching assistant?

Your Teaching Assistant (TA) will contact you as soon as you are onboard. You can request for the extensions/phone numbers and the official email address to interact with them.

Will TAs help me in the session?

Yes, TAs will help you with any customer, labs, and content-related issues. TAs will be there to assist you online and offline as well.

What is NPS? How does it affect me?

NPS is NET PROMOTER SCORE that is measured with a rating system.

NPS = (Promoters - Detractors)/Total Surveys * 100.

It affects you directly if fewer surveys are received or if the participants are rating the session as passive or detractors.

What do promoters, passives, and detractors refer to?

Promoters are the learners who rate the session 9 or 10. This indicates that they are happy with the session conducted for the day.

Passives are the learners who rate the session 7 or 8. This indicates that they are unhappy with the session conducted today, but they could follow you partially.

Detractors are the learners who rate from 0 to 6. This indicates that the session was not up to the mark and needs a lot of improvement.

Should I follow the instructions?

Yes, these recommendations are tried and tested. It helped other trainers improve their NPS and we are sure that it will help you as well.

Can I be creative?

Yes, provided you are trying to explain the concepts with visual aids such as Epic pen, and UML diagrams.

I want to share some files with the learners. How do I do it?

You can use our community forum for communicating and sharing study material. Upload the files and then share the forum link in your classes.

Can I share my contact details with the learners?

No. We strictly avoid sharing trainer details with the learners. Our community forum is recommended for communicating, where learners can message you and discuss offline.

I need more resources. Whom should I contact?

Please feel free to contact the Teaching Assistants (TAs) for the course.

We wish you all the best for your upcoming training with us.

Please contact your Teaching Assistants for further assistance and information.