

# Test Plan

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## OBJECTIVES

1. To evaluate the Duolingo website in terms of the user experience that it creates. Specifically, we would like to answer the following questions:
  - a. Do users understand the onboarding feature?
  - b. Can users effectively begin a language curriculum?
  - c. Can users complete the account signup without difficulty?
  - d. Do users understand how to progress through different modules?
  - e. Are users satisfied with how the website presents the instructional material?
  - f. Do users feel the system is an effective tool for learning a new language?
  
2. To Identify the site's key strengths and assess how it could be further improved to better meet the needs and expectations of the user:
  - a. Identify features, tasks and controls that are difficult or ineffective
  - b. Classify and prioritize these items
  - c. Provide actionable recommendations for solving these issues

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## STIMULI

The Duolingo website (<http://www.duolingo.com>) will be the focus of the evaluation.

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## PARTICIPANTS

8 participants will be recruited from 3 states, with the expectation that at least 6 will show.

Participants' profile:

- Mix of ages
- Mix of genders
- Most college graduates
- Have an interest in learning a new language or further expanding existing knowledge
- A mix of experience with learning a new language
- Moderate and above experience with the internet (required)

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## EVALUATION MEASURES

Qualitative measures (primary)

- Usability issues observed
- User comments
  - Spontaneous comments from the user will be recorded and clarified
  - Prepared questions will be asked in order to assess specific areas of focus

### Quantitative measures (secondary)

- Degree of success/failure for task completion
  - Success - participant was able to complete tasks with relative ease in a reasonable amount of time (e.g. # of seconds / minutes)
  - Assisted Success - participant completed the task but required additional system support in order to overcome the obstacle
  - Failure - participant aborted or failed to complete the task in a reasonable amount of time
- Ease-of-use ratings for each task
  - At the end of each task, the participants will be asked to rate their ability to use the interface from 1 (very difficult) to 10 (very easy)
- Overall ease of use for the educational system as a whole
  - The participants will be asked to rate their ability to use the entire system from 1 (very difficult) to 10 (very easy)

## PROCEDURE

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### 1. INTRODUCTIONS

- Upon starting the session the participant will be greeted and asked to sign a consent form
- Moderator will introduce the participant to the topic and goals of the session
- Moderator will explain the process for the conducting the session:
  - Participant should try to complete the tasks as they normally would without worrying about making a mistake
  - Participant is encouraged to think aloud and feel free to express any opinions as they arise, both positive and negative. (Think aloud procedure will be used to provide insight into the participant's thought process, which will result in richer qualitative data)

### 2. WARM-UP QUESTIONS

- Participants will be asked a few warm-up questions to:
  - Verify background information collected during the screening process
  - Gather additional background information such as:
    - Assess whether they have attempted to learn a language before and if so their level of self-described fluency
    - If so, assess how long its been since they received education and in what type of environment
    - Whether they have engaged in other types of online learning

### 3. TASKS ON THE WEBSITE

- Participant will be asked to perform a few tasks using the Duolingo website. The tasks will cover the following use cases:
  - Beginning the onboarding procedure and selecting a language
  - Continuing instruction with another module
  - Completing an account signup
  - Assessing their progress and scores
  - Setting a daily goal for progress
  
- Sample task instructions:
  - *“Imagine that you are hosting a French exchange student in your home for a year. You find out that he does not speak English, so communication will be difficult. You decide to learn the language to make his first months more comfortable. He is arriving in 2 months. Use [www.duolingo.com](http://www.duolingo.com) to start learning French.”*
  - *“You have now finished your first module in learning French. Continue on with a different module in French.”*
  - *“You decide to take a break and start learning again the next day. Create an account and save your work.”*
  - *“You want to know how well you are doing in learning French. Go to the screen where you can review your progress.”*
  - *“You want to make sure you are regularly learning French and competing your lessons everyday. Change your daily goal.”*

## LAB SETUP

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Test room:

- Moderator (has a timing device, protocol and notepad or laptop to record notes)
- Participant
- Laptop or desktop for using the website
- Printed ease of use and likelihood of continued use scales