Operational Concept Description (OCD)

LINGGGO

Team 3

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Version History

Date	Author	Version	Changes made	Rationale
10/10/15	SY	1.0	• Original template for use with LINGGGO v1.0	• Initial draft for use with LINGGGO v1.0
10/18/15	CCR, YX	1.1	• Content quality verify	• Content verify
11/29/15	SY	1.2	• Update business work flow diagram	• Diagram update

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1. Introduction

1.1 Purpose of the OCD

This document provides, in detail, the shared visions and goals of the stakeholders of LINGGGO.

1.2 Status of the OCD

The status of the OCD is currently at the on-going in the bug fixing phase. The scope of the LINGGGO has been evaluated to meet the clients' core requirements, and the prototype has been built so that development team can design and build the system with feedback from the client.

2. Shared Vision

Table 1: The Program Model

Assumptions
1. People desire to learn language 2. People desire to learn from a native people 3. People like to teach 4. People are going to go online to match language exchangers

| Stakeholders	Initiatives	Value Propositions	Beneficiaries
• Language learners • Developers (LINGGGO team members) • Maintainers (Wesley plays the role now, and clients will hire others when our team is not in charge of the project) • Testers (LINGGGO team members) • Clients (Zsuzsa Londe and Ajay Rai)	• Build the new system • Learn languages • Maintain the system	• Language learners find each other to practice language • Increasing learning opportunities • Increase chances for language learners to meet native speakers • Increase awareness of other culture through individual meetings and conversations • Save time looking for language learners	• Language learners

2.1 Benefits Chain
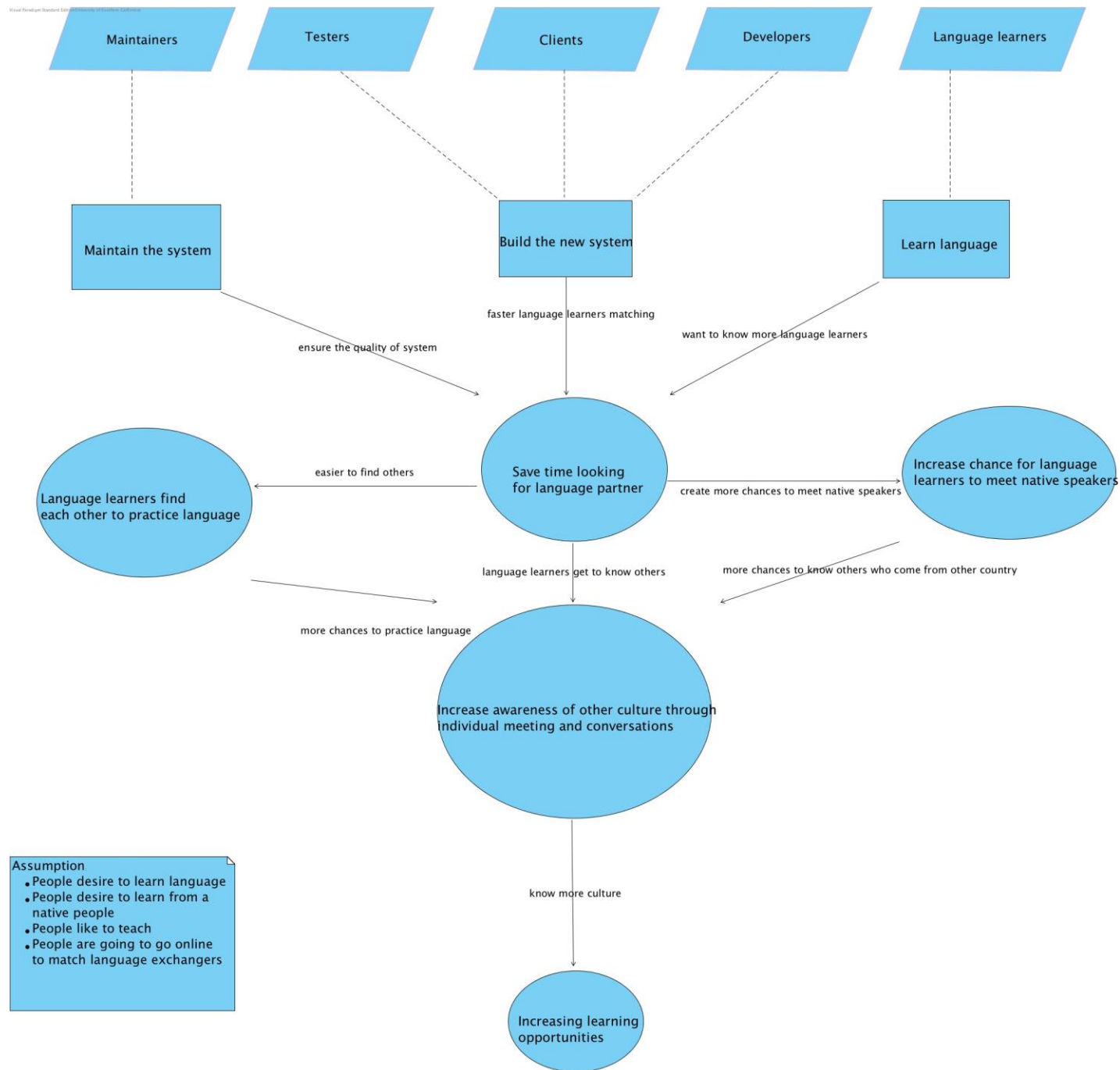
Figure 1: Benefits Chain Diagram of LINGGGO

2.2 System Capability Description

- LINGGGO is a social collaboration website helping people find language exchangers.
- The main target customers are language learners who are over 18 years old.
- Language learners may have a difficult time finding practicing partners, and there are seldom systems/platforms that offer the opportunity for language learners to search for fellow language learners. LINGGGO provides a space for language learners to find and interact with each other.
- Language learners want to find other language learners, and this is why they will choose to use LINGGGO.
- For now, italki; livemocha; and duolingo are our competitors.
- Our LINGGGO system offers language learners a match feature. Language learners can match with other language leaners; LINGGGO also offers an inbox messaging feature which allows language learners to send messages to each other.
- LINGGGO has a user registration module for Language Learners to create and manage their accounts

2.3 System Boundary and Environment

Visual Paradigm Standard Edition(University of Southern California)

Language learners

Maintainers

– Matching System
– Registration and Profile
Management System
– Message System

Support Infrastructure
– PHP
– MYSQL
– AWS
– AngularJS
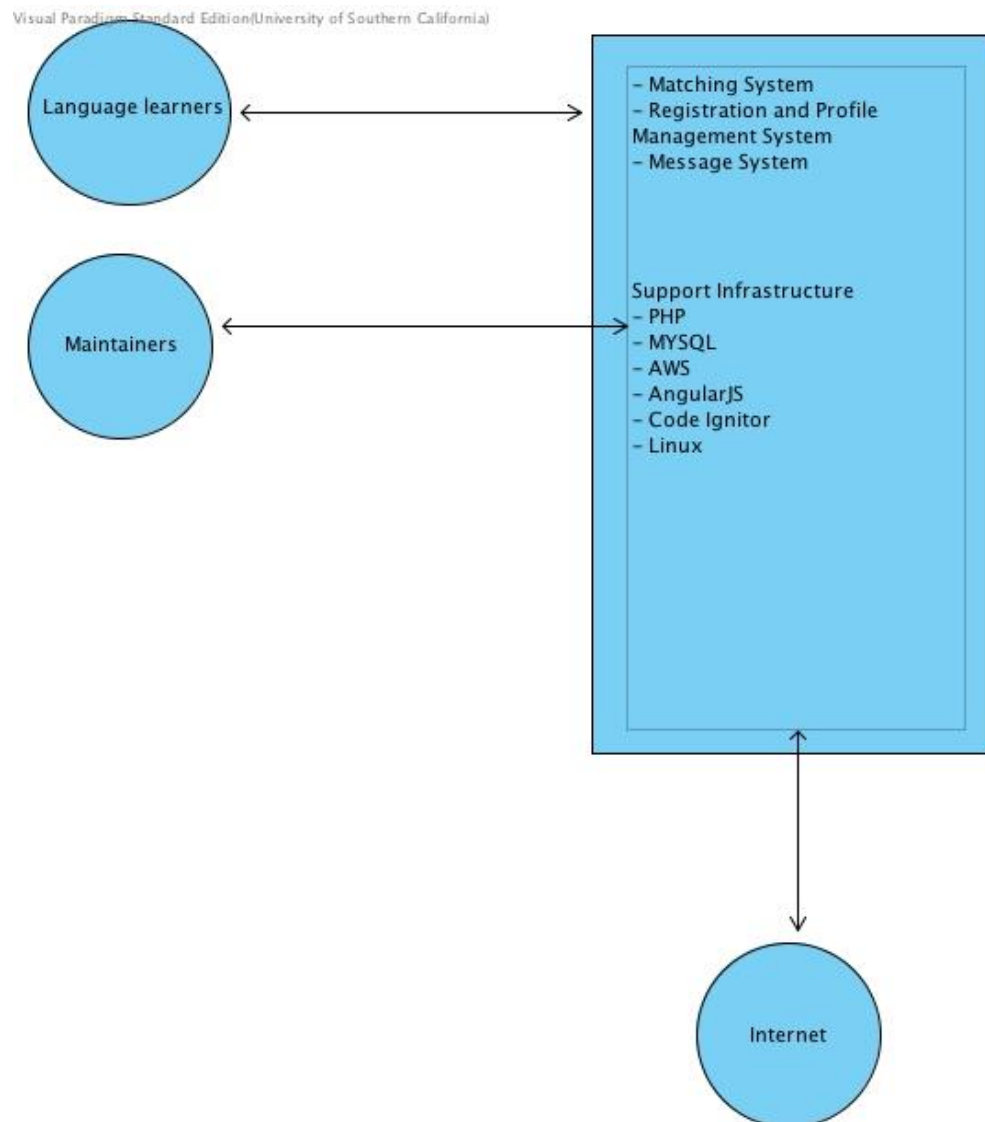– Code Ignitor
– Linux

Internet

Figure 2: System Boundary and Environment Diagram of LINGGGO

3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

Hardware: AWS
Software: PHP Code Igniter, Angular JS, Slack, Jira, Github, Gmail, Winbook

3.1.2 Artifacts

1. **Win-Win agreements**: it describes the win-win conditions that our team discussed with clients.
2. **Project plan**: this describes our schedule for the whole development lifecycle.
3. **Project risk and defect**: this shows the top risks and defects we come up with.
4. **Client interaction report**: this describes the achievement our team made with clients.

3.1.3 Current Business Workflow

Since we build our system from scratch, so we do not have a current business work flow.

3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

Capability Goals	Priority Level
Match language learner	High
Register accounts and manage profile	High
Send/Receive messages	High

3.2.2 Level of Service Goals

Table 2: Level of Service Goals

Level of Service Goals	Priority Level	Referred WinWin Agreements
The language learner can receive the Match result in 3 seconds	High	As a language learner, I can use this system to find other learners learner, so that I can practice or teach a language
The language learner can	High	As a language learner, I can

Register accounts in two 2 after filling all the fields correctly and update of profile management in 3 seconds		register an account on the website and modify my privacy policy so that I can avoid malicious usage of my personal info.
The language learner can Send/Receive messages within 3 seconds	High	As a language learner, I can use this system to communicate with a native speaker, where I can get to know more about their culture.

3.2.3 Organizational Goals

OG-1: Increase language proficiency via practicing language with others

OG-2: Increase learning opportunities via language matching

OG-3: Increase chance for language learners to meet native speakers via language matching

OG-4: Increase awareness of other culture via individual meeting and conversations

3.2.4 Constraints

CO-1: We must make budget as low as possible

3.2.5 Relation to Current System

Table 3: Relation to Current System

Capabilities	Current System	New System
Roles and Responsibilities	N/A	N/A
User Interactions	N/A	N/A
Infrastructure	N/A	N/A
Stakeholder Essentials and Amenities	N/A	N/A
Future Capabilities	N/A	N/A

3.3 Proposed New Operational Concept
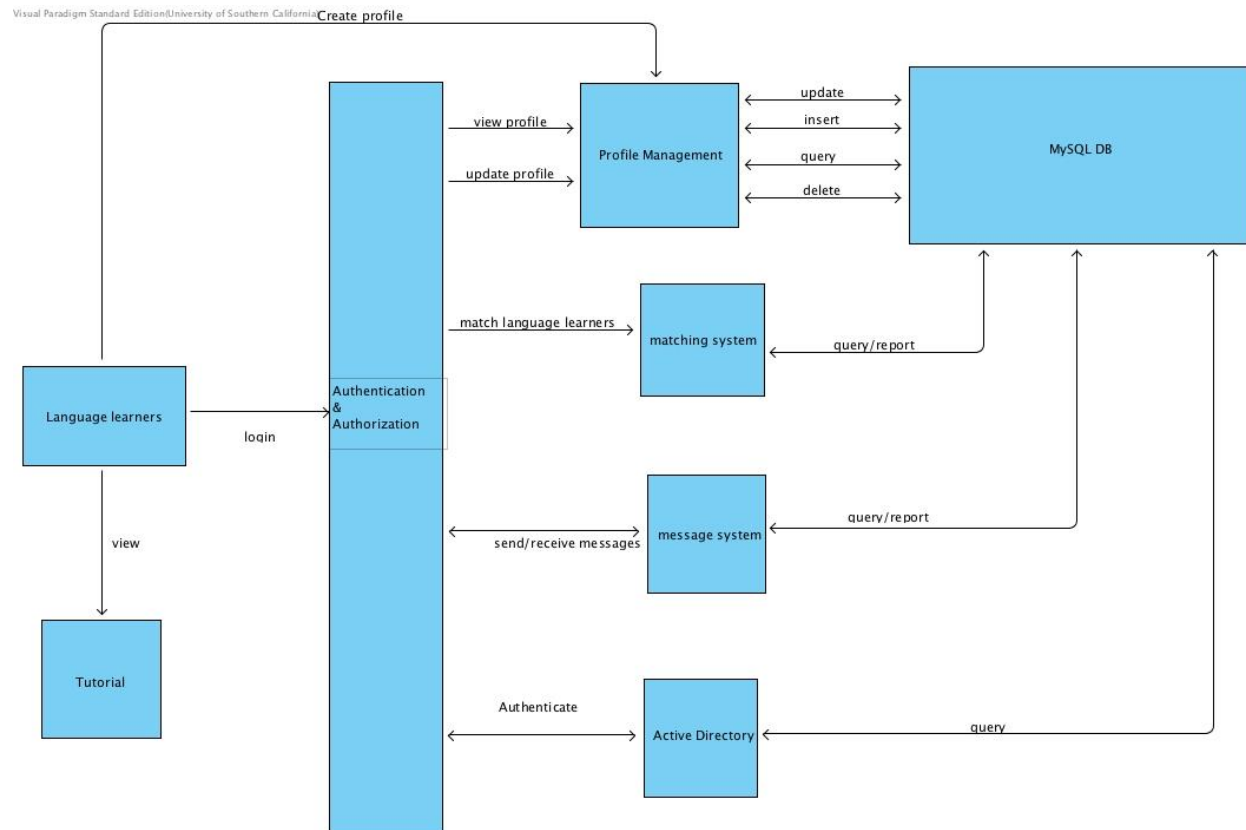
3.3.1 Element Relationship Diagram

Figure 3: Element Relationship Diagram of LINGGGO
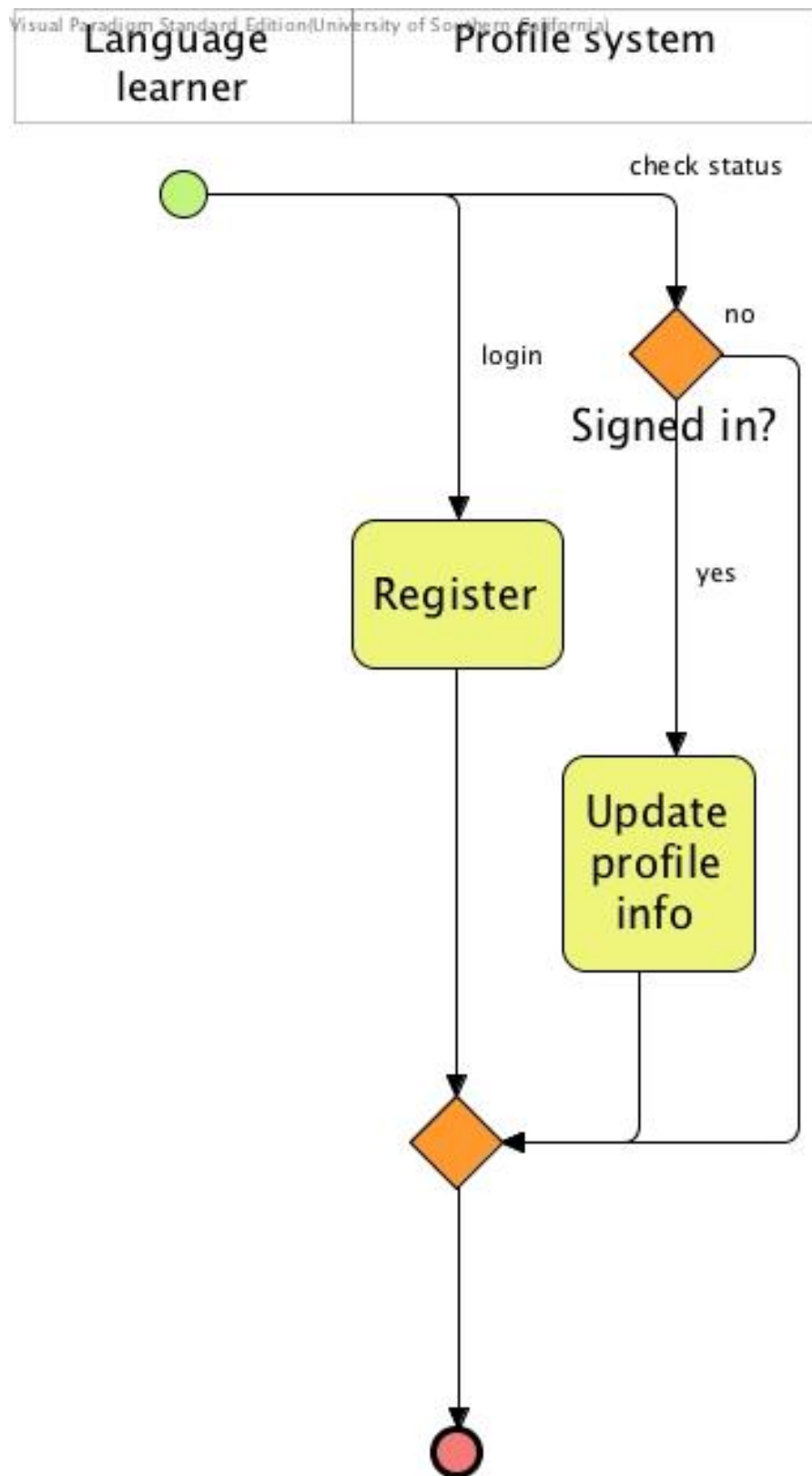
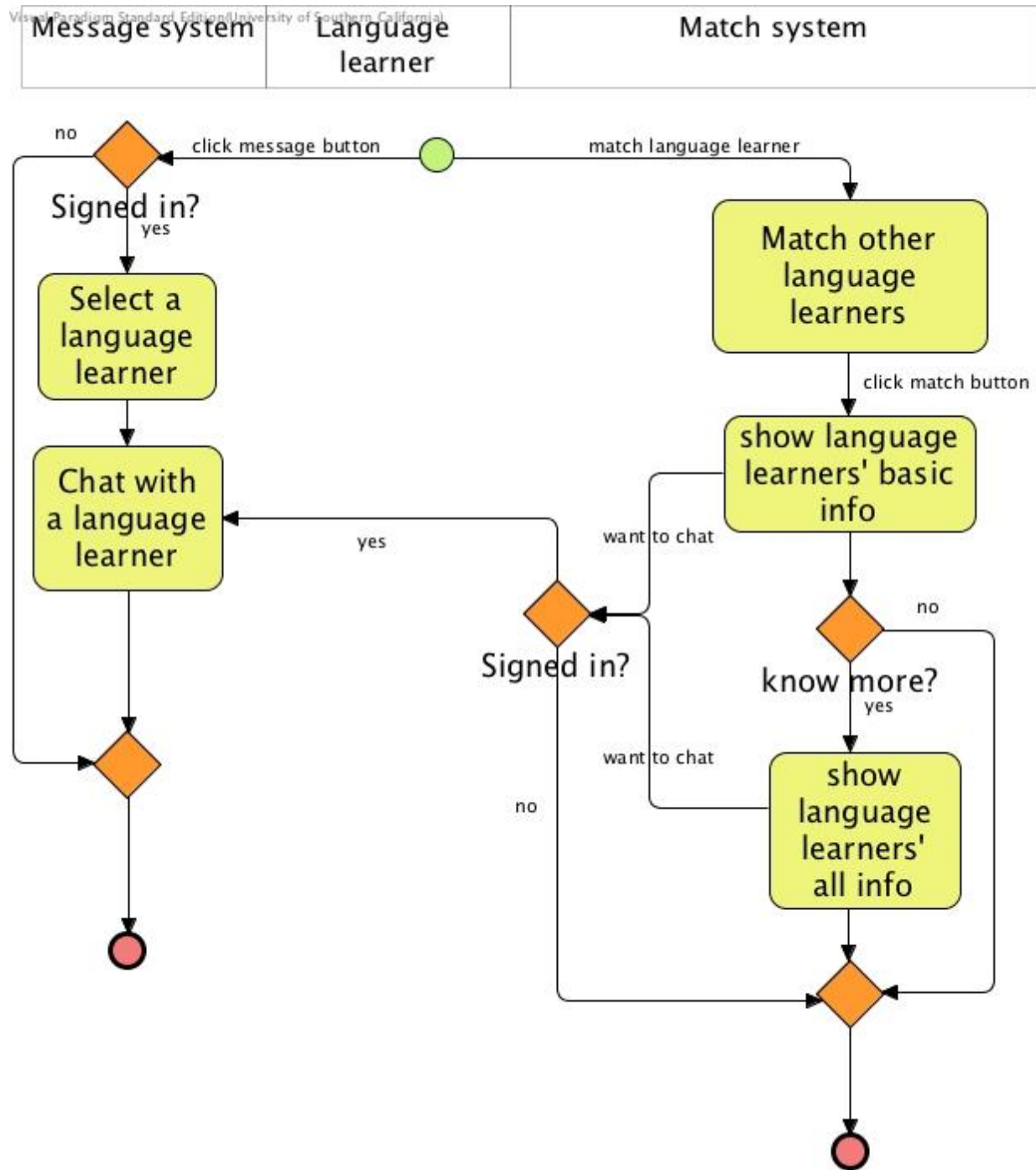## 3.3.2 Business Workflows

Figure 4: Business Workflow Diagram of LINGGGO

Figure 5: Business Workflow Diagram of LINGGGO

3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

Since we build our system from scratch, so we do not have organizational transformations.

3.4.2 Operational Transformations

Since we build our system from scratch, so we do not have an operational Transformations