UPLog
Software Architectural Design

Submitted to:

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Unique Reference:

The documents are stored in the https://github.com/Secretmapper/OrgUP under *03-Design Engineering Section*.

Purpose:

To develop a portion of the Revised Software Architecture
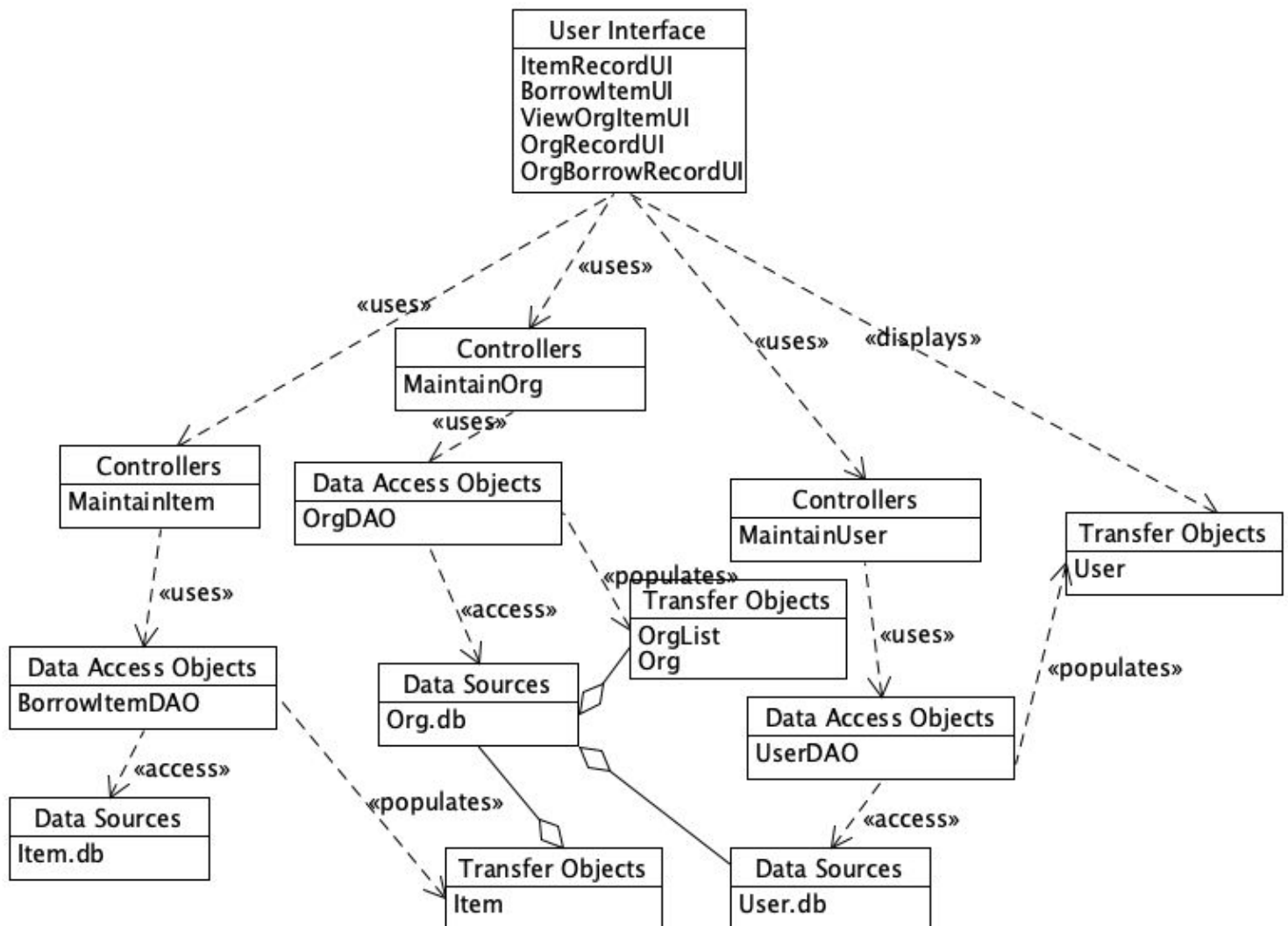
Audience:

ORganizations within UP.

Revision Control:

Revision Date	Person Responsible	Version Number	Contribution/Modification
10/31/19	Aira Jazel Ang	1.0	Prepared Initial Document; Added DAO Packages
10/31/19	Arian Allenson Valdez	1.5	Add Revised Software Architecture Model Diagram, User Interface Package, Transfer Object Package, Data Source Package
10/31/19	Bianca Bueno	2.0	Added Controller Packages
11/01/19	Arian Allenson Valdez	2.5	Added Attribute/Methods for DAO packages

System Name: UPLog - Manage Org Description/Items

Description: This use-case will allow org administration to manipulate their records such as their name, description, and the items they can lend to other organizations. This also allows org administration to add, edit, and delete items on their initial listed items. The borrowed/received items can also be viewed and accessed through this use case.

Revised Software Architecture Model:

User Interface Package:

Screen Name	Description
ItemRecordUI	This is the screen to the system for maintaining the Item Record. *Responsibilities*: public void enterItemData(String itemname, String imageurl, Integer points, Boolean isBorrowed, Boolean isAvailable) public void enterOrgDescription(String description)
BorrowItemUI	This is the screen of the user to the system for borrowing items. *Responsibilities*: public void borrowItem(Item item)
ViewOrgItemUI	This is the screen of the user to the system for viewing org items. *Responsibilities*: public String enterSearchCriteria() public Item getItemRecord(ItemRecordString searchCriteria)
OrgRecordUI	This is the screen of the org admin to the system for managing the org. *Responsibilities*: public void enterOrgDescription(String description)
OrgBorrowRecordUI	This is the screen of the org admin to the system for managing the org. *Responsibilities*: public void approveBorrowRequest(BorrowRequest request) public void declineBorrowRequest(BorrowRequest request)

Controllers Package:

Controller Name	Description
MaintainUser (abstract)	This is the control that maintain user records. It is considered an abstract class.
MaintainItem (abstract)	This is the control that maintain item records. It is considered an abstract class.
AddItem	This is the control that adds an item to the system. It extends MaintainItem. *Responsibilities*: public void AddItem(Item item)
EditItem	This is the control that edits an item in the system. It extends MaintainItem. *Responsibilities*: public void editItem(Item item)
DeleteItem	This is the control that deletes an item in the system. It extends MaintainItem. *Responsibilities*: public void deleteItem(Item item)
MaintainOrg	This is the control that maintain org records. It is considered an abstract class.
EditOrg	This is the control that adds info to orgs to the system. It extends MaintainOrg. *Responsibilities*: public void editOrg(Org org)

Data Access Objects Packages:

DAO Name	Description

OrgDAO	This data access object is responsible for getting org data from database.
	
	Attributes:
	private Org org;
	
	Methods:
	private void connectOrgDatabase(String URL, String user, String password);
	private void insertOrg(Org org);
	private void updateOrg(Org org);
	private void deleteOrg(Org org);

UserDAO	This data access object is responsible for getting the user information.
	
	Attributes:
	private User user;
	
	Methods:
	private void connectUserDatabase(String URL, String user, String password);
	private void insertUser(User org);
	private void updateUser(User org);
	private void deleteUser(User org);

BorrowItemDAO	This data access object is responsible for getting items which would be borrowed from database.
	
	Attributes:
	private BorrowItem borrowItem;
	
	Methods:
	private void connectBorrowItemDatabase(String URL, String user, String password);
	private void insertBorrowItem(BorrowItem borrowItem);
	private void updateBorrowItem(BorrowItem borrowItem);
	private void deleteBorrowItem(BorrowItem borrowItem);

Transfer Objects Package:

Class Name	Description
Item	This is the entity class item, which contains the data about items borrowable. *Attributes*: private String itemname; private String imageurl; private Boolean isBorrowed; private Boolean isAvailable;
Org	This is the entity class org, which contains the data about the org *Attributes*: private String name; private String description;
OrgList	This is the entity class for org lists, which contains a list of orgs. *Attributes*: private Array<Org> orgs;
User	This is the entity class user, which contains the data about the user. *Attributes*: private String username;

Data Sources Package:

File Name or Database Name	Description
User.db	This is the datasource User, which contains the data about the users.
Org.db	This is the data source of org records found in a relational database system.
Item.db	This is the data source of the item records found in a relational database system.