

Educator Preparation Ohio Program Locator Search

Actors



User

User

An individual with no specific role or affiliation with the system who has access to all public-facing aspects of the site.



College

College User

An individual with specific relationship with both the Board of Regents (BOR), the University Systems of Ohio (USO) and the Ohio Department of Education (ODE) in that they represent a College, Community College or University, and they possess a role or affiliation with the USO.



ODE

ODE User

An individual with specific relationship with both the Board of Regents and the Ohio Department of Education (ODE) in that they are employees within the accreditation, graduate studies, and certification program of ODE, are tasked with working specifically with the BOR to oversee the transfer of programs, certifications and accreditation data to the EPOPL system, and have no role or affiliation with the USO.



Admin

Admin

An individual with specific relationship with both the Board of Regents (BOR), the University Systems of Ohio (USO) in that they represent a both the BOR and the USO, or are agent thereof and have been granted executive-level admin access to the EPOPL system.



Mobile Device

Mobile Device

A device that is capable of rendering webpages in, and operating under a Mobile OS (platform-independent) and capable of using 3G, 4G, WiFi or Bluetooth. By extension, "Mobile Device" can also infer a "Mobile User" - the individual operating the mobile device.



Data

Data

An object, array or file that is passed, parsed, converted, scripted or made available by any actor in this system.



Session

An object created when JQuery activates at login of any part of the system behind the system admin firewall. All of the attributes and aspects of the session variable transfer to this actor and those limits and extensions are inferred when this actor is invoked.



Google API

The external API for accessing Google maps via a broadband, ethernet, wifi or 3g/4g connection. It is maintained and served externally by Google.



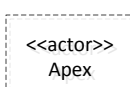
GPS

A specific reference to the capability of a mobile device to triangulate and access the LOE GPS system and return an accurate latitude and longitude coordinate or geocache array.



LAMP Stack

Instance of Linux, Apache, MySQL and PHP running Drupal 6x and hosted on virtual server by OARNet.



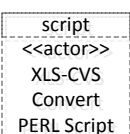
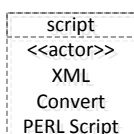
Apex System

Instance of Apex running Apache and extending Apex markup, JQuery, Javascript and HTML. This system is also intended to be used to store Extended HTML (XML) artifacts that act in partnership with the LAMP, Drupal, and PERL scripts.



Browscap

A module available through Drupal and accessed via the LAMP stack that can identify and create a JQuery-independent session variable to determine three parameters: OS, Platform, and DOM.

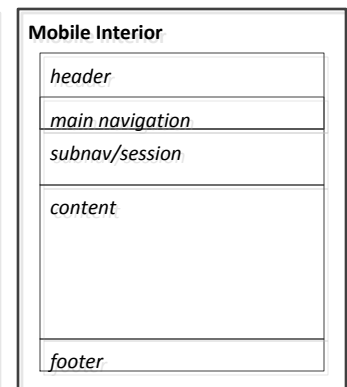
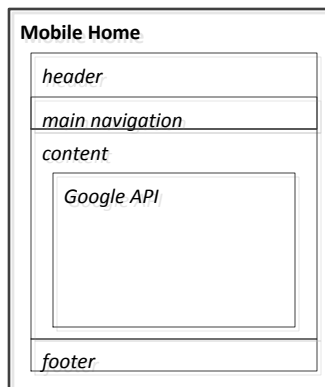
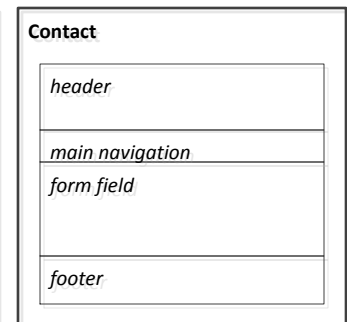
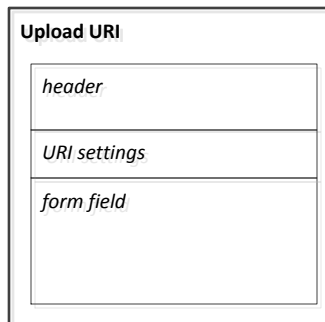
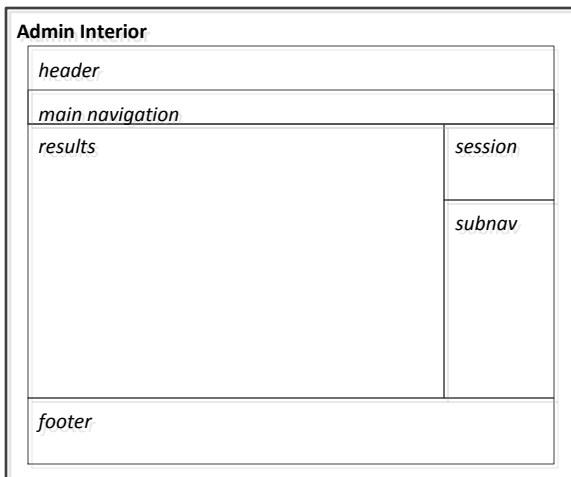
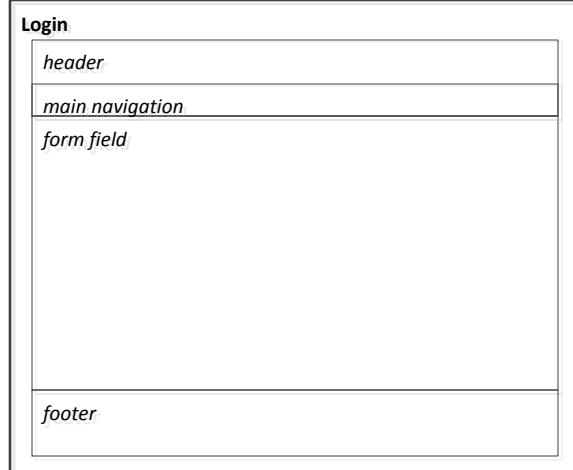
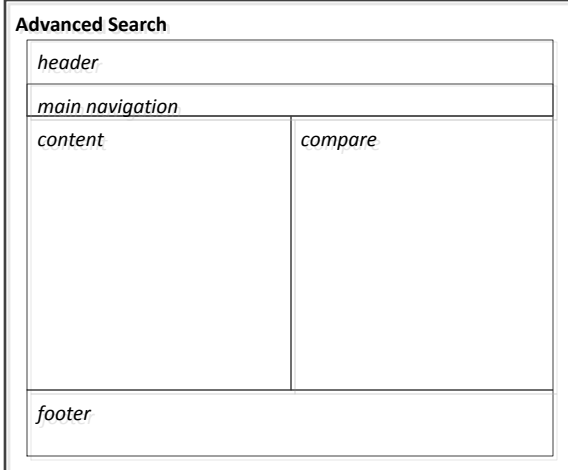
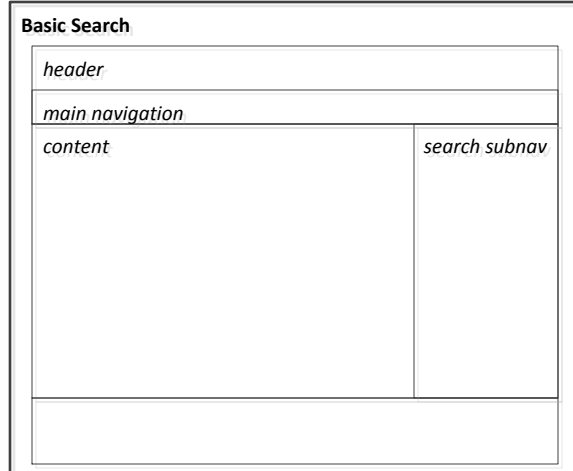
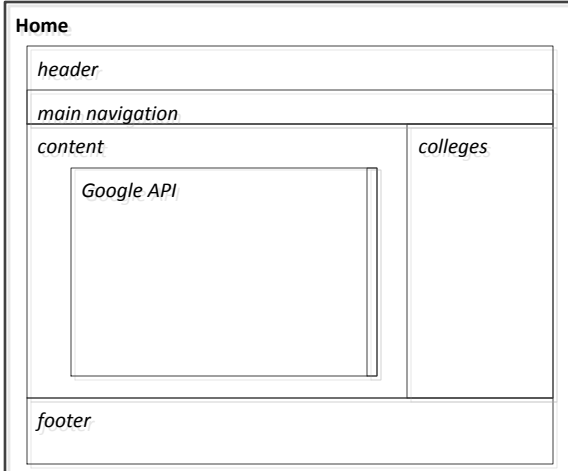


PERL Scripts:

Two scripts which reside on the LAMP stack and written in PERL, with PHP and JavaScript Handles used to convert pre-ordered arrays of data into specific structure and format – determined by the scripts.

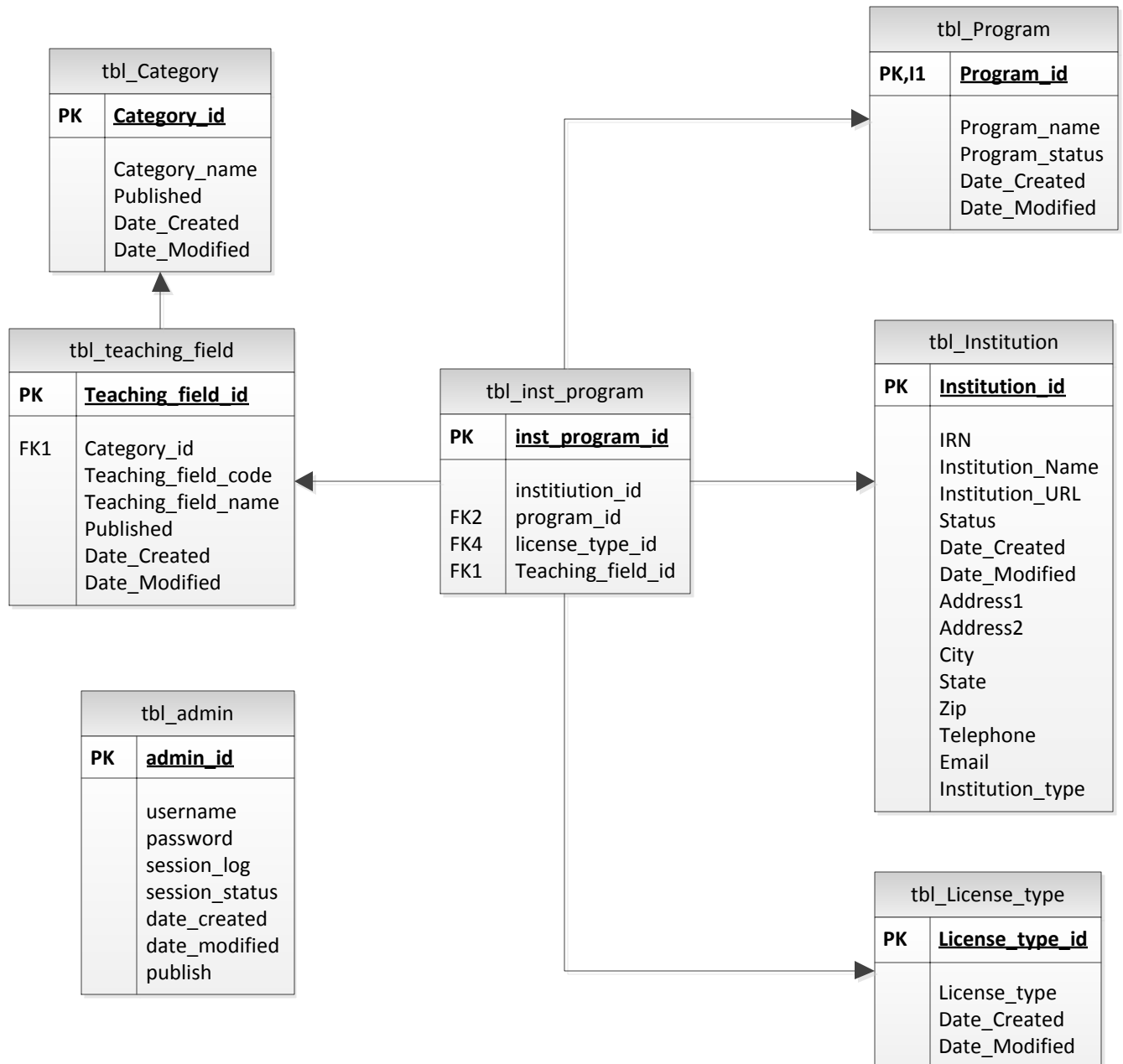
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Wireframes



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Database Diagram



Educator Preparation Ohio Program Locator Search

Use Case Library

Basic Search

Search

Search Extensions

Institution

Degree

Related

Similar

County

Map

Geocache

View

Result

Advanced

College Search

College

Mobile Search

Mobile

Logins

Login

College_login

Platform ID

Current

Admin System

Admin

Admin-Only System

Executive

ODE XLS Batch

ODE_batch_updates

ODE XML Batch

ODE_batch_xml_inserts

USO Mobile Update

USO_mobile

Other Use Cases

Convert

Compile

Array

Append

Filter

Results

Add

Count

Batch

Batch

GetBatch

Overflow

Display Use Cases

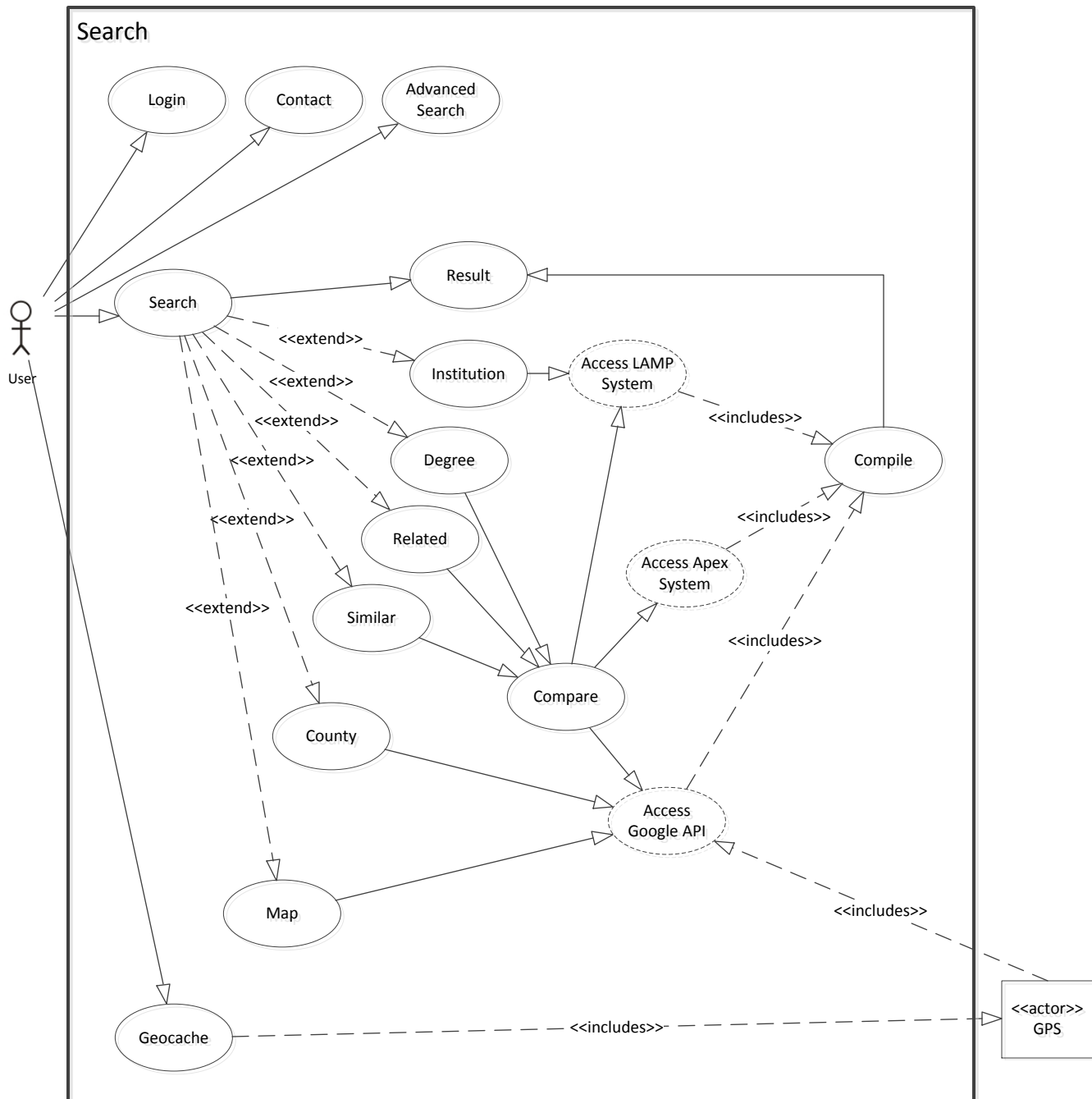
Details

Upload

Compare

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Use Case Diagram: Basic Searches



Search Use Case Details:

Client wants Users to be able to use the system to Search through the database. The **Home** page will allow Users to search by **College**, or **Institution** List, and via a **Google Map**.

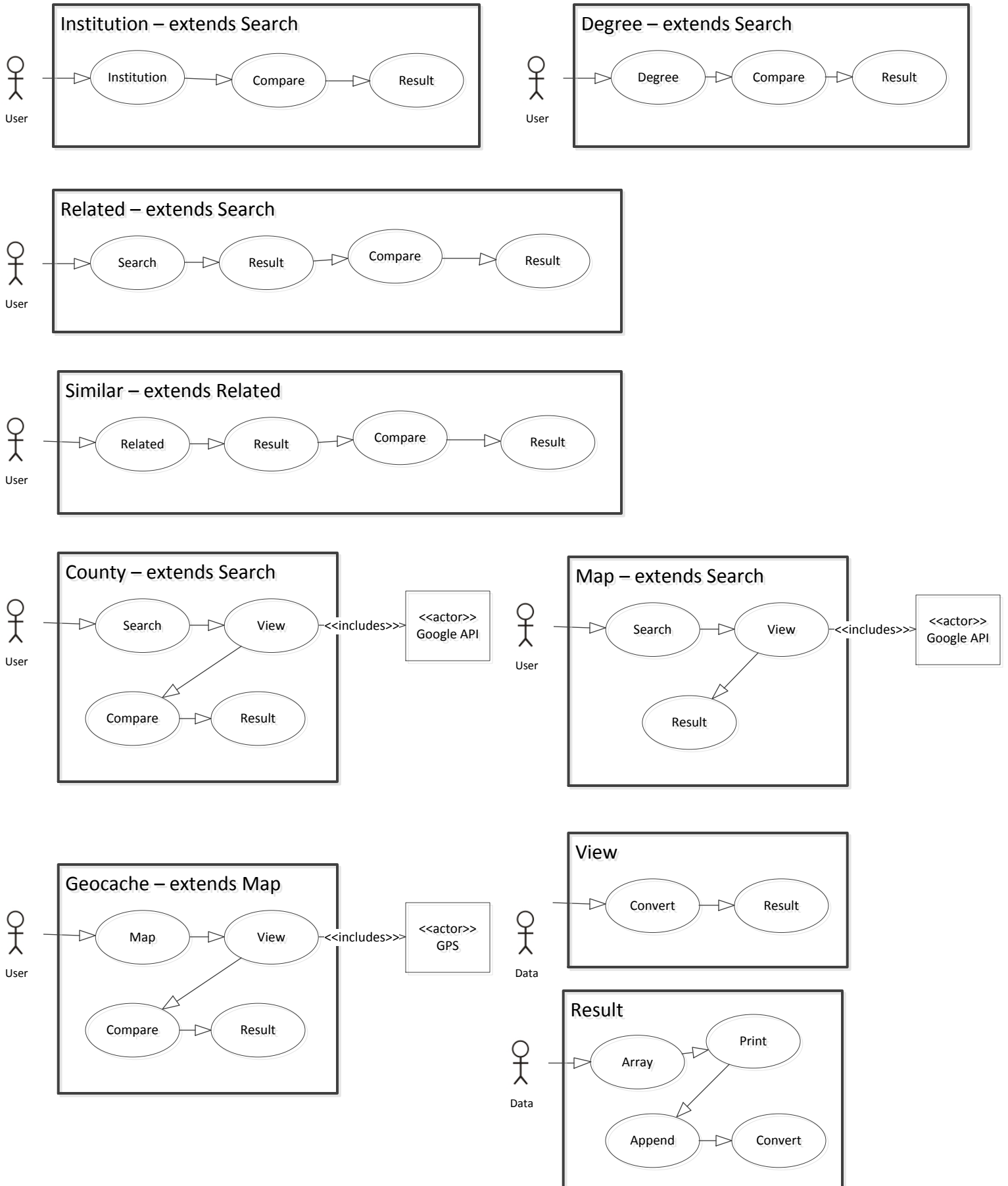
Client wants this access to this value of Search open to the public and will not require a session system for controlling access to the **LAMP** and **Apex** data.

The plan is to extend the **Search** feature via links to other pages containing data calls for searching for **College Type**, **Degree**, **Related Degrees**, **Similar Programs**, By **County**, via an interactive **Map**, and via the GPS Longitudinal signal from the Users **Mobile** device.

Searches with multiple datasets like **Degree**, **Related**, and **Similar** will use **AJAX** to display **Results** on **Compare**. **Compare** will then send the data requests to the various databases, where they will be joined using **Compile** and displayed using **Result**.

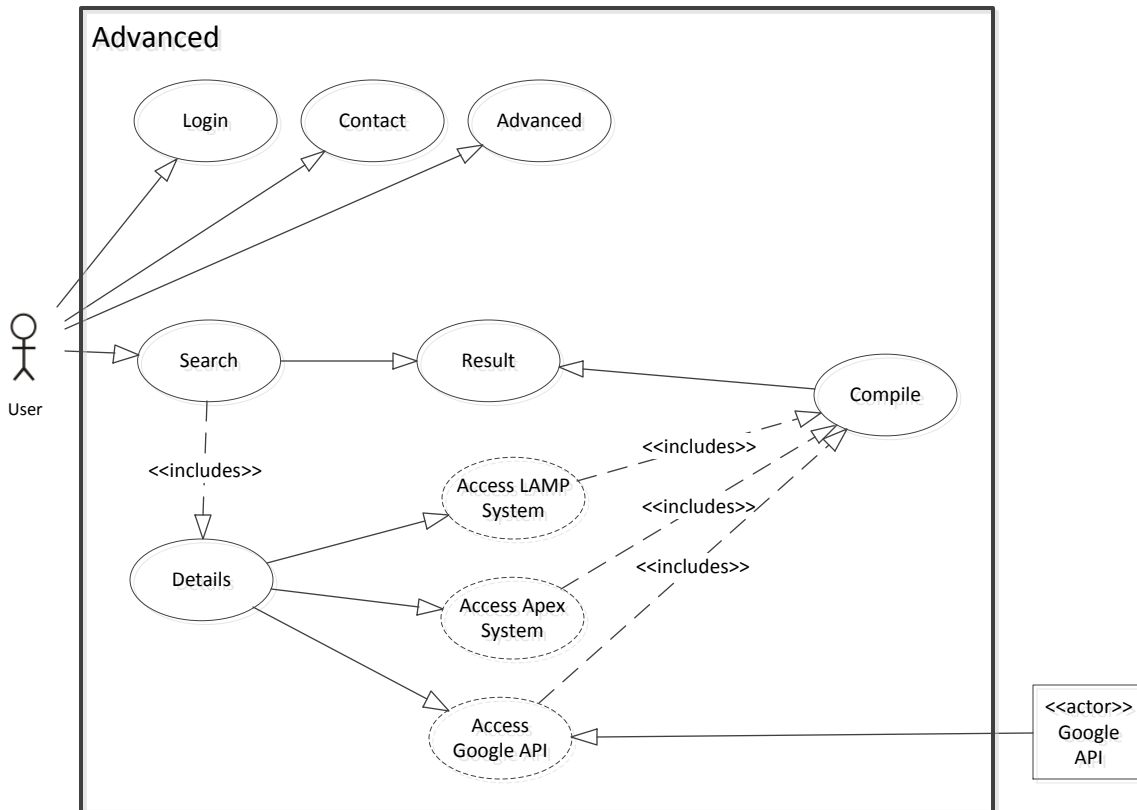
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Use Case Diagram: Search Extensions



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Use Case Diagram: Advanced Searches



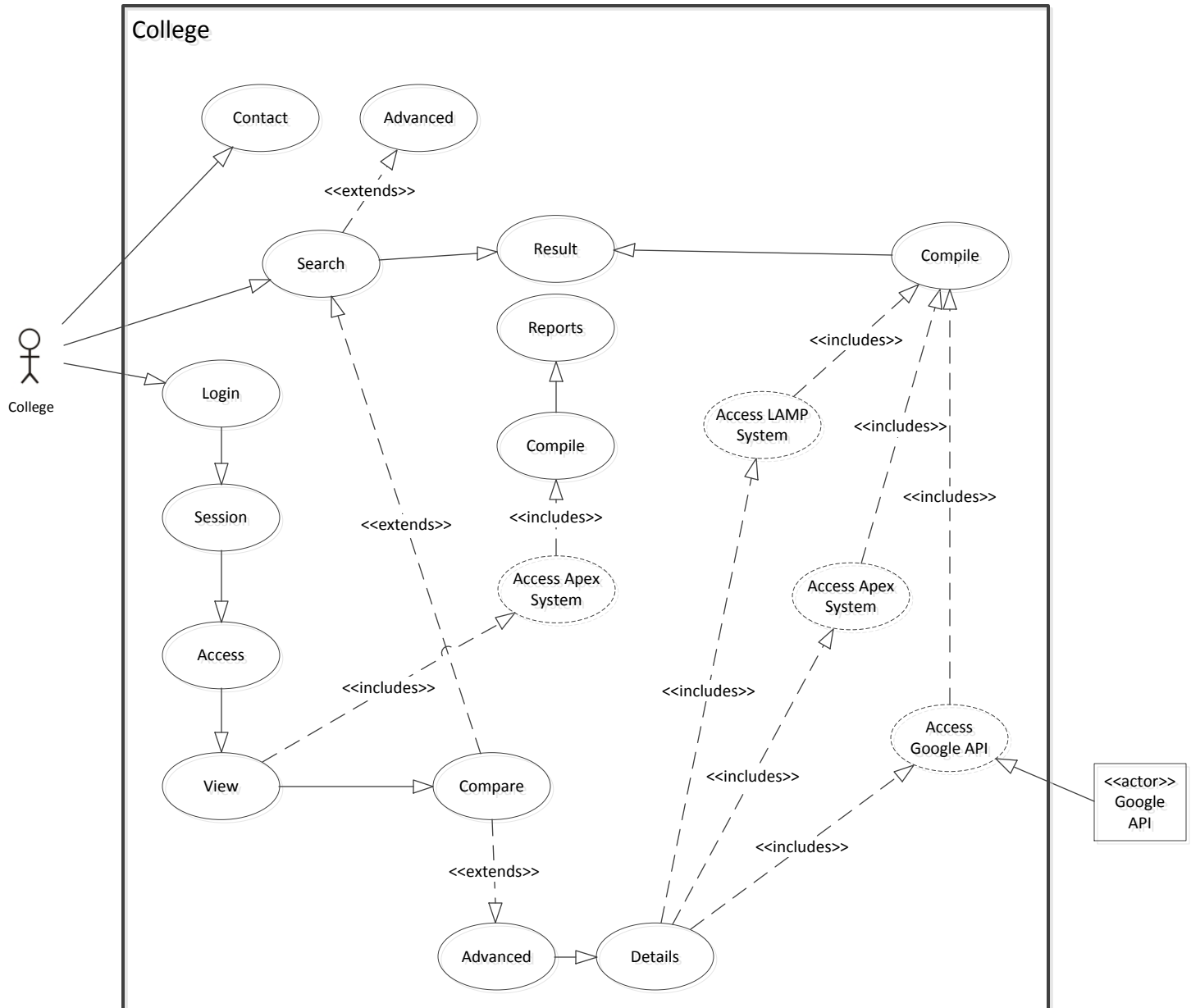
Advanced Use Case Details:

Client wants the **User** to be able to use the **system** to **Search** through a filter of all possible query types. Client wants this access to this value of Search open to the public and will not require a session system for controlling access to the **LAMP** and **Apex** data.

The plan is to extend the **Search** feature via the **Advanced** search. The **Advanced** search will display all values searchable by the **system** on the **Advanced** search page. The **User** will select aspects they are interested in and submit. The **system** will aggregate the options the **User** has selected on a **Details** page. Results will then be aggregated, sent to **Compile**, and displayed by **Result**.

Educator Preparation Ohio Program Locator Search

Use Case Diagram: College-Level Searches



College Use Case Details:

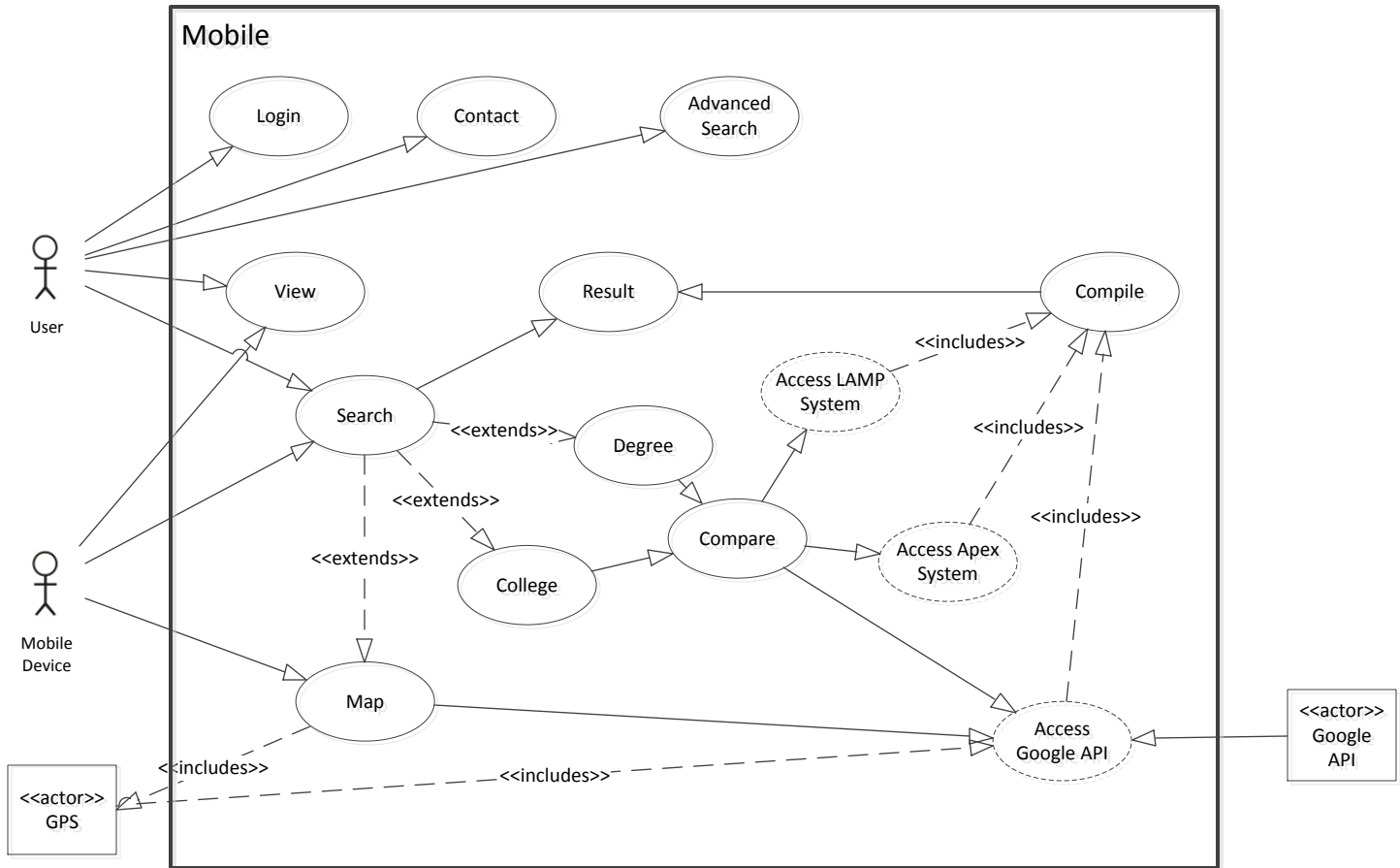
Client wants a **College** to be able to use the **system** to **Compare** other **College** programs and degrees. Client wants this access restricted to Colleges. This requires a **session** system for controlling access to the **LAMP** and **Apex** data.

The plan is to extend the **Advanced** search feature via the **View** and **Compare** pages.

The client would also like for Colleges to be able to make **Reports** of these **Searches**. These **Reports** will be **Compiled** like the **Advanced Search** use case and workflow, merged and presented using the **Result** Use Case. In the case of the **Report** feature, it will be limited to **Result** of a **Compile** data call of the **Search Details** from the **LAMP** and the **APEX** datasets. This will then be passed up to **Compile**, and then to **Result**.

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Use Case Diagram: Mobile Searches



Mobile Use Case Details:

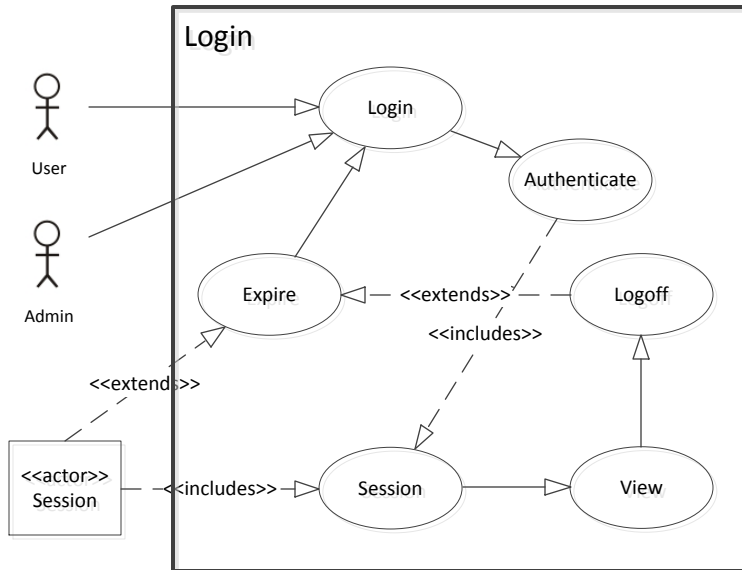
Client wants a **User** to be able to use the **system** via **Mobile Device**. The system will allow the **User** to **View**, **Search**, and **Compare** other **Colleges** and **Degrees**. The **Mobile system** is truncated in its **Search** features due to project budget and time constraints. In addition to the truncated search, the Mobile Search also uses the **Current** session id to determine the platform from which they are searching.

Client wants the **system** to allow the **mobile** device to broadcast the Longitudinal position of the **User** and quickly identify **Colleges** and **Universities** and **Community Colleges** within a 25 mile radius of the **User**. There are no plans to include Able and ADL entities at this time.

The plan is to extend the **Advanced** search feature via the same Use Case and Workflow as **Advanced** Search. This will then be passed up to **Compile**, and then to **Result**.

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Use Case Diagram: Logins

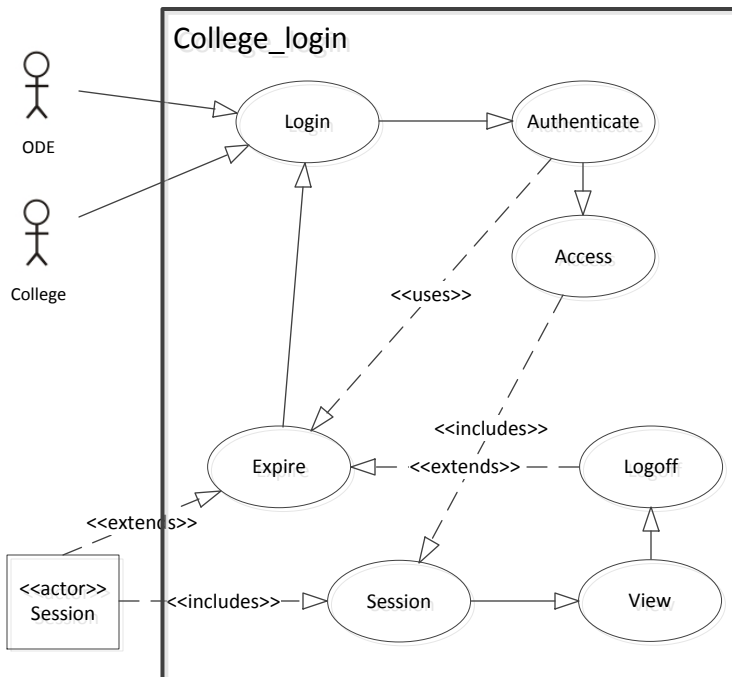


System Login Use Case Details:

Client wants a **User** to be able to **Login** to the **system**. The addition of an **Authenticate** layer before the **Session** is set allows for detection of **Users** who are discouraged from logging in as a general **User**, such as **Colleges** and **ODE**. These entities have specialized **Views** and **Login** status with the system.

The **Session** variable will remain active for 59 minutes, per the Clients request. If no activity is detected by the **system** after 59 minutes, the **system** will **Expire** the **Session** and the **User** will be redirected to the **Login** Page. Additionally, the **User** can opt to **Logoff** the **system**, in which case, they will be routed through **Expire** and redirected to the **Login** Page.

If the DOM is closed, the system will automatically **Expire** the **Session**.



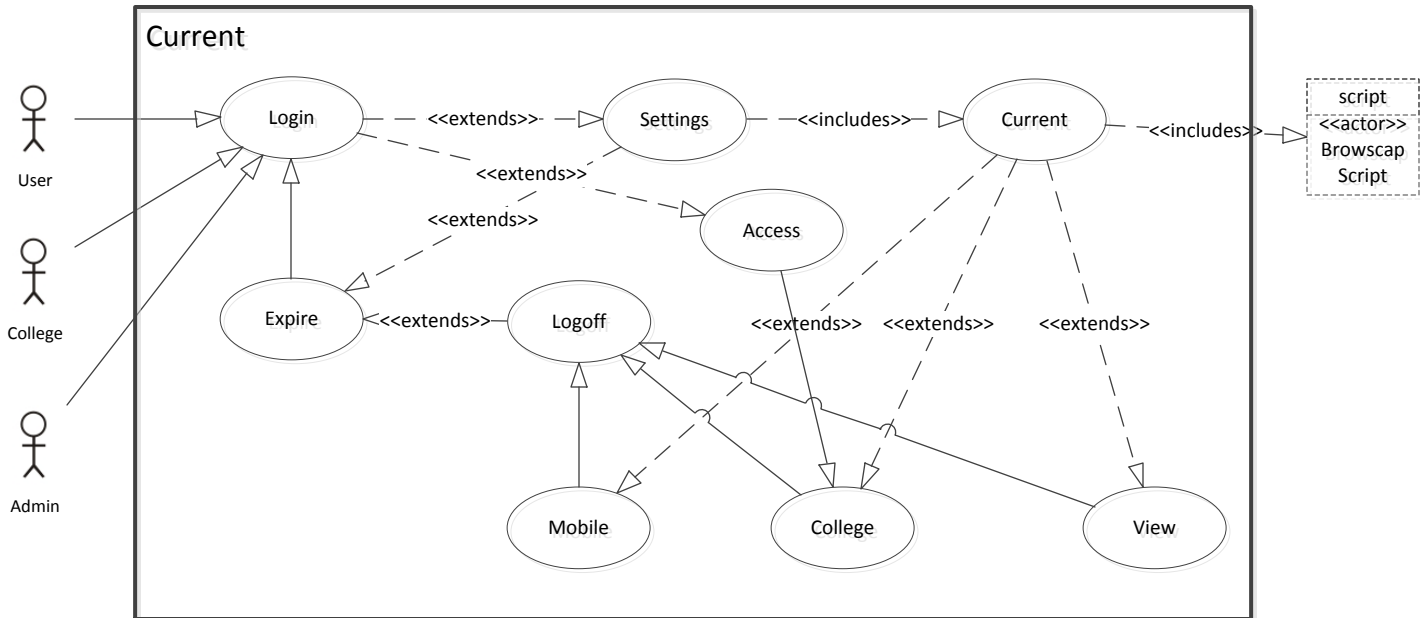
College Login Use Case Details:

Client wants a **College** to be able to **Login** to the **system** as a **College** entity. The addition of an **Authenticate** layer before the **Session** is maintained, and an additional action, **Access**, is enabled to identify the Admin-level **Access** to the **Apex system**.

All other **Session** and **Expire** variables apply to the **College Login Use Case** as apply to the **System Login**.

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Use Case Diagram: Platform ID



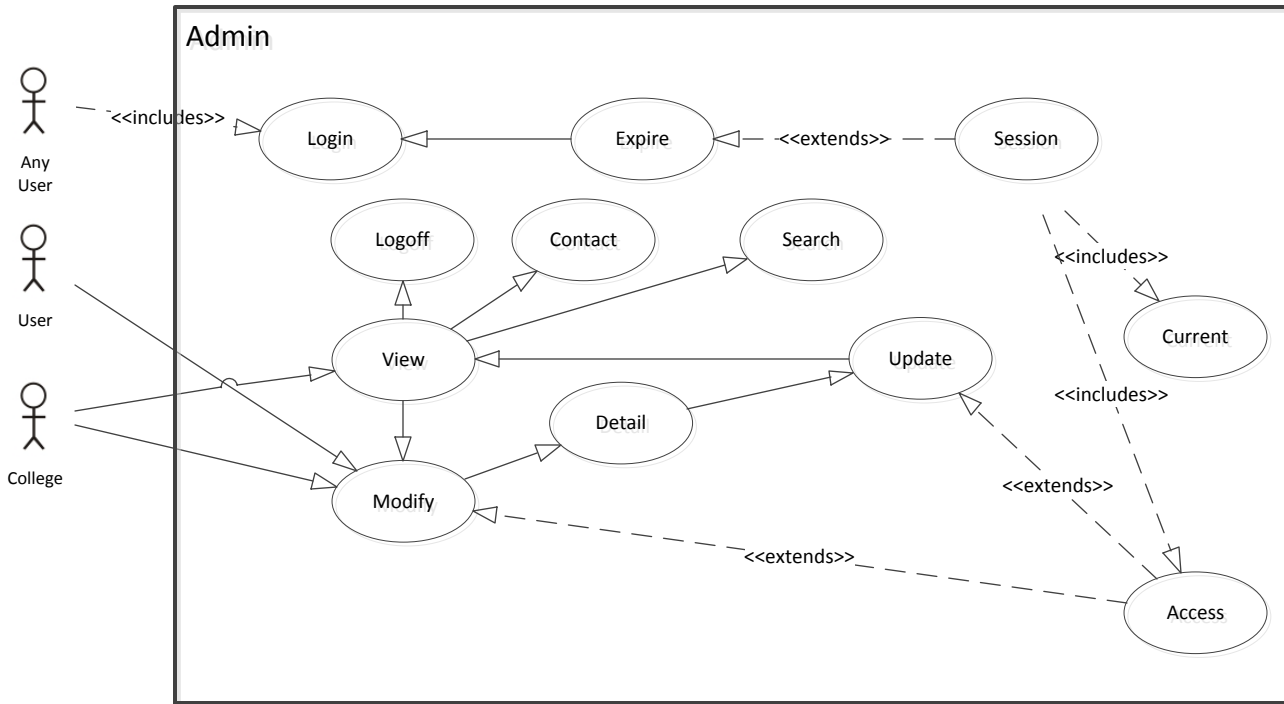
Current Use Case Details:

Client wants the **system** to record the browser, OS and location of a **User** who uses the **system Login**. A **script** is added to the **system** that captures this info from the DOM. The **Current** Use Case appends this data as a URL variable to the **Session**.

All other **Access**, **Session**, and **Expire** Use Cases apply to the other **Login** Use Cases.

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Use Case Diagram: Admin Features



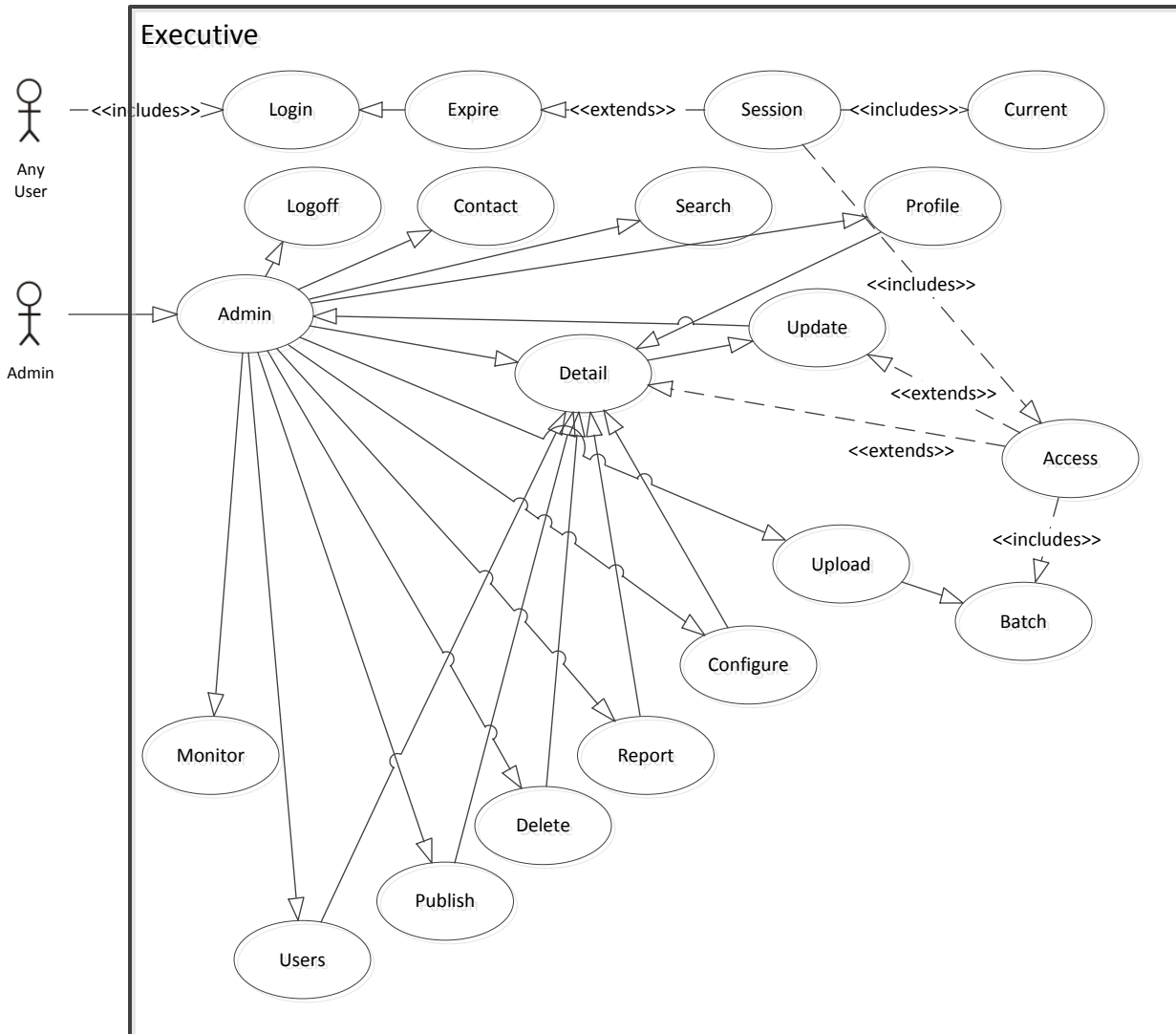
Admin Use Case Details:

Client wants the **system** to record the browser, OS and location of a **User** who uses the **system Login**. A **script** is added to the **system** that captures this info from the DOM. The **Current** Use Case appends this data as a URL variable to the **Session**.

All other **Access**, **Session**, and **Expire** Use Cases apply to the other **Login** Use Cases.

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Use Case Diagram: Admin-Only Features

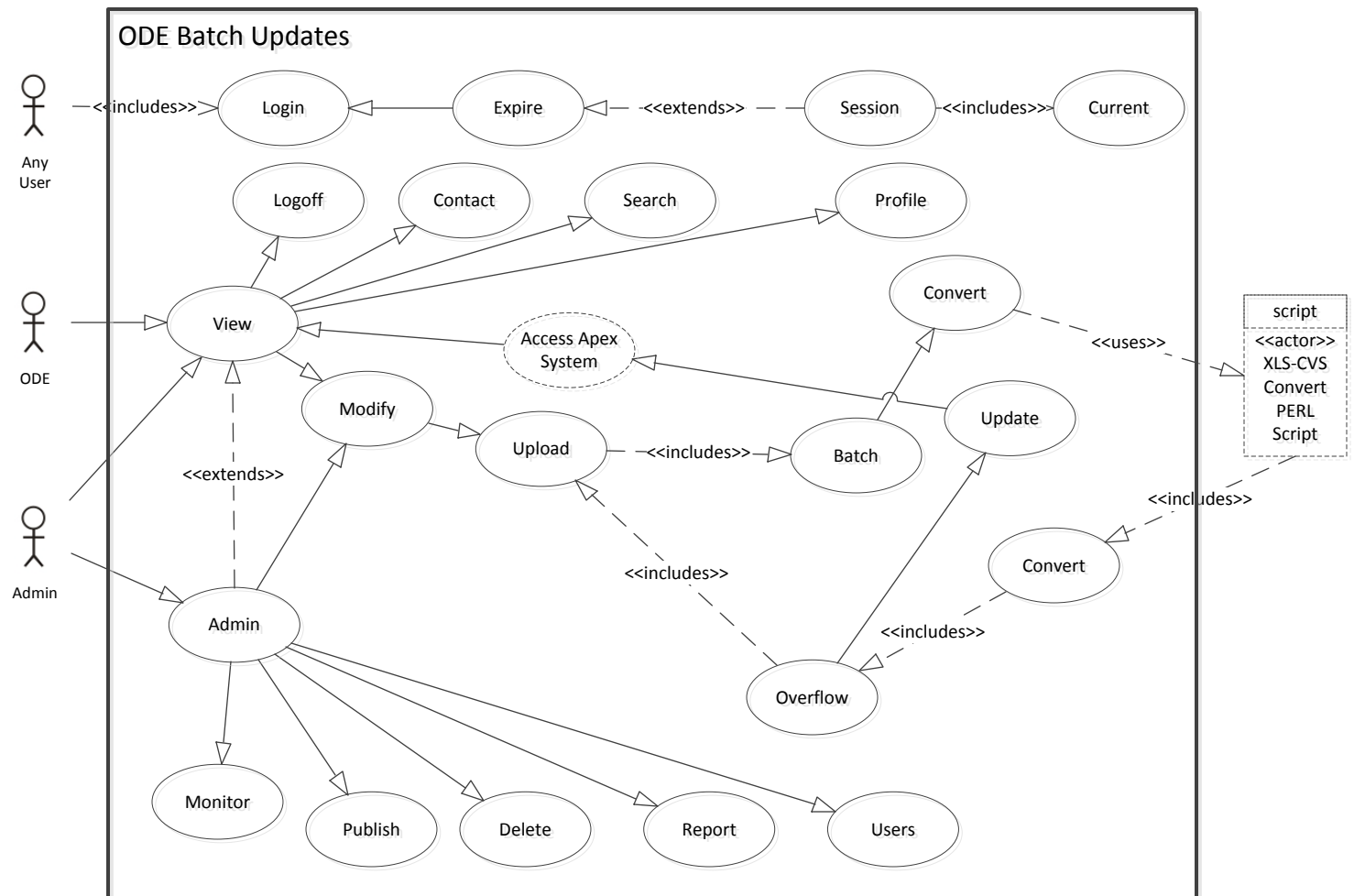


Executive Use Case Details:

Client wants the **system** to Allow the Admin access to all high-level components in the system, and the ability to Upload, Configure, Update, Delete, Report, Modify, Publish, and Modify information. Access to this section of the Admin section is restricted to Admins only.

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Use Case Diagram: ODE XLS Batch Updates



ODE Batch Updates Use Case Details:

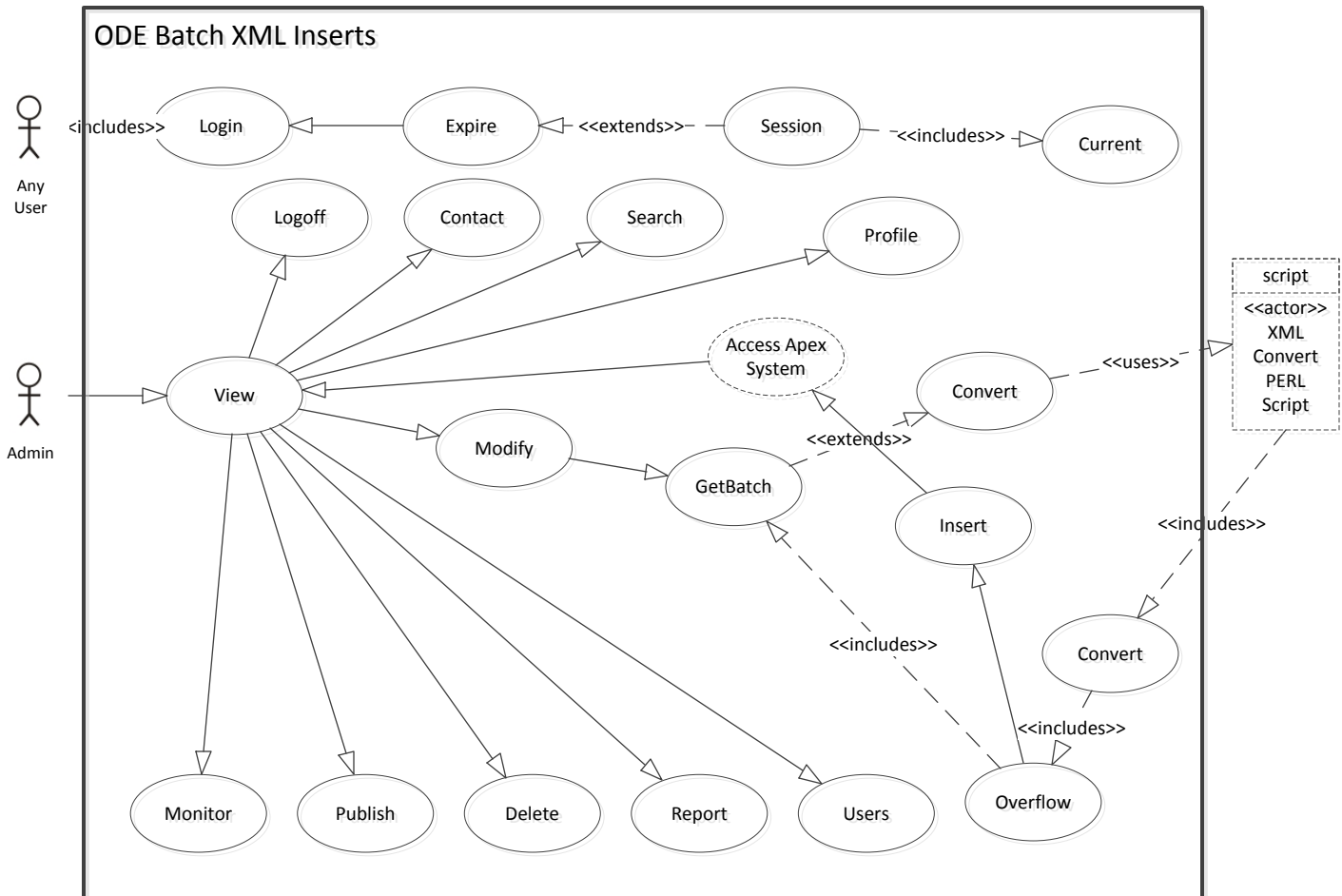
Client wants the **system** to store, collect and manage artifacts from a specific User (ODE) to input into the **system**. However, the "system" is an amalgam of ODE-held XLS spreadsheets, Access databases, and the existing Apex System.

The solution to this, short of building an expensive online tool, is to treat these artifacts as raw data in an **Array**.

This is an overview of the XLS conversion **Batch** process and **Update** to the **system**. For details see the **Batch** Use Case.

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Use Case Diagram: ODE XML Batch Inserts



ODE Batch Updates Use Case Details:

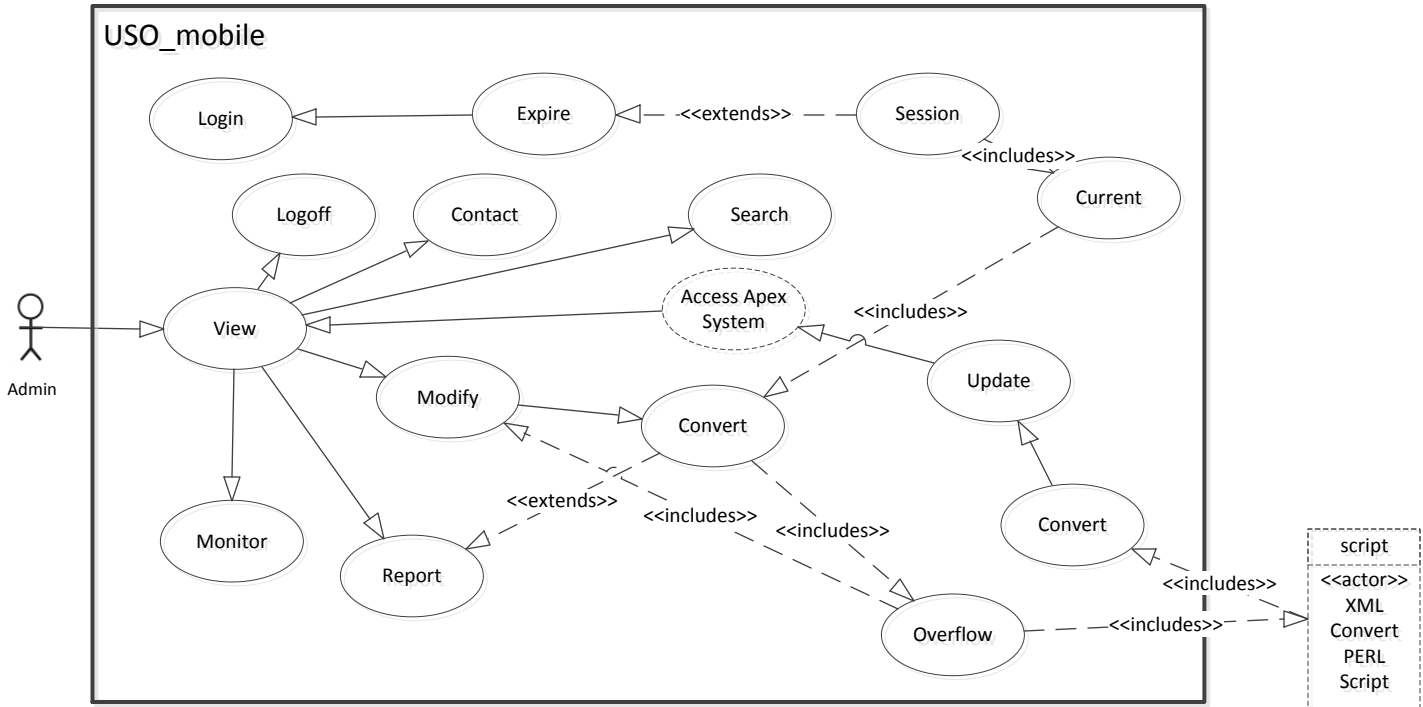
Client wants the **system** to share the data collected and input into the **Apex system** with mobile users and the USO Mobile App that the EPOPL model is designed to augment.

In **GetBatch**, the **system** is automated to expect an **Array** of data that will be **Converted** and placed into an XML document. The **system** makes a data call to the **MySQL** instance of the **LAMP**, as well as a data call to the **Apex system** to determine default state. The **Apex system** manages other sites for the Client and holds the XML-parsed files that the mobile apps use.

For more details, see the **GetBatch** Use Case.

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Use Case Diagram: USO Mobile App Data Update



USO Mobile App data Update Use Case Details:

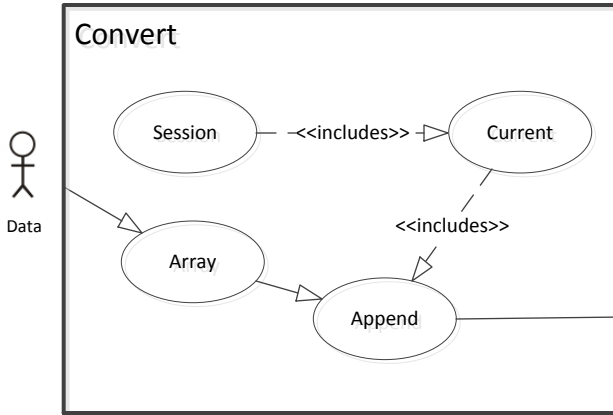
Client wants the **system** to record the browser, OS and location of a **User** who uses the **system Login**. A **script** is added to the **system** that captures this info from the DOM. The **Current** Use Case appends this data as a URL variable to the **Session**.

The Client wants to limit **Update** calls from a non-mobile OS, and will use **Current** to determine the OS. This **Update** is an extension of the **View**, **Convert**, and **Modify** Use Cases.

All other **Access**, **Session**, and **Expire** Use Cases apply to the other **Login** Use Cases.

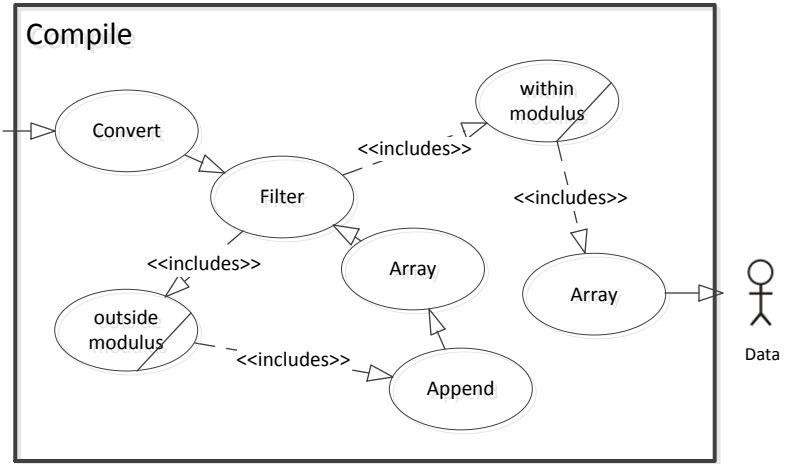
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Use Case Diagram: Various Use Cases



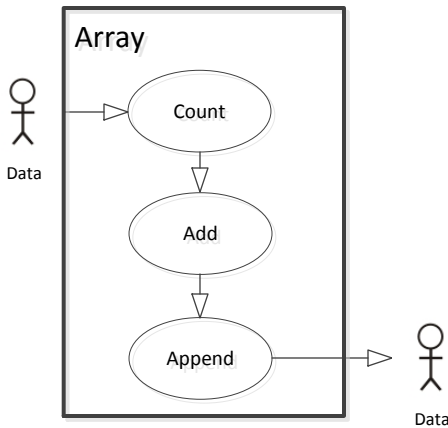
Convert Use Case Details:

Client wants the **system** to pre-assemble data into a format that will work with other Use Case instances. The **Array** is passed to **Append** which adds the platform data sent by **Current** Use Case.



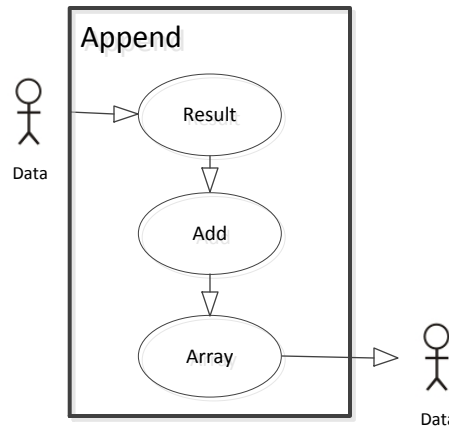
Compile Use Case Details:

Client wants the **system** to extend the **Convert** Use Case to apply a global **Filter** that determines how many lines there need to be in an **Array**.



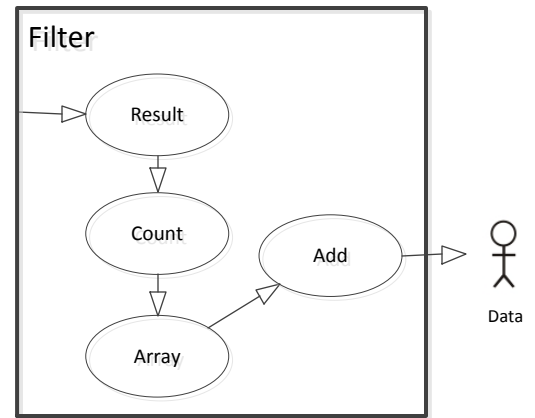
Array Use Case Details:

Client wants the **system** to pre-assemble data into a format that will work with other Use Case instances. The **Array** is passed to **Append** which adds the platform data sent by **Current** Use Case.



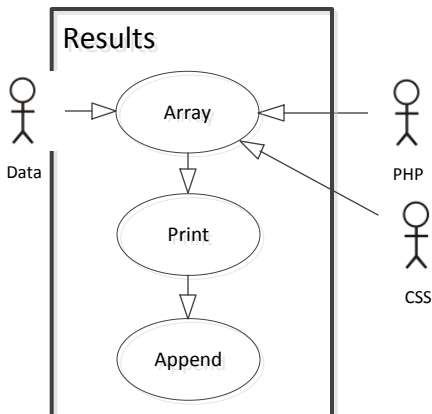
Append Use Case Details:

Client wants the **system** to pre-assemble data into a format that will work with other Use Case instances. The **Array** is passed to **Append** which adds the platform data sent by **Current** Use Case.



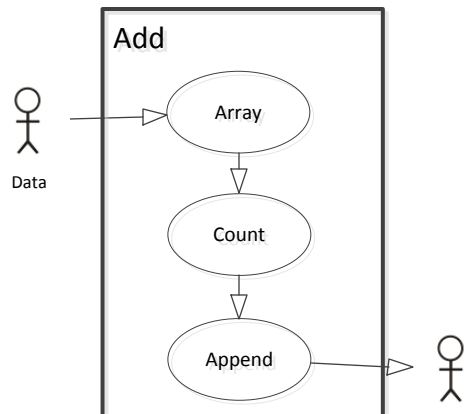
Filter Use Case Details:

Client wants the **system** to pre-assemble data into a format that will work with other Use Case instances. The **Array** is passed to **Append** which adds the platform data sent by **Current** Use Case.



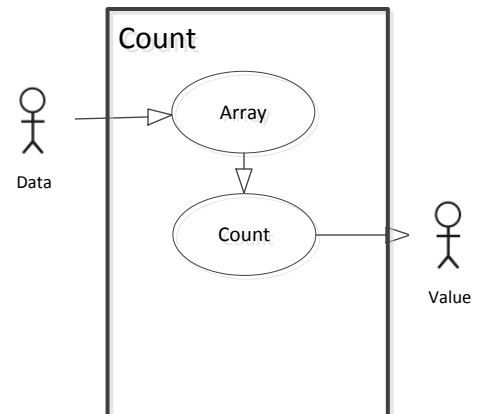
Results Use Case Details:

Client wants the **system** to display **Result** from any Use Case using the CSS and features of the page on which it is displayed.



Add Use Case Details:

Client wants the **system** to have a simple Tool to **Add** lines to the end of an **Array**.

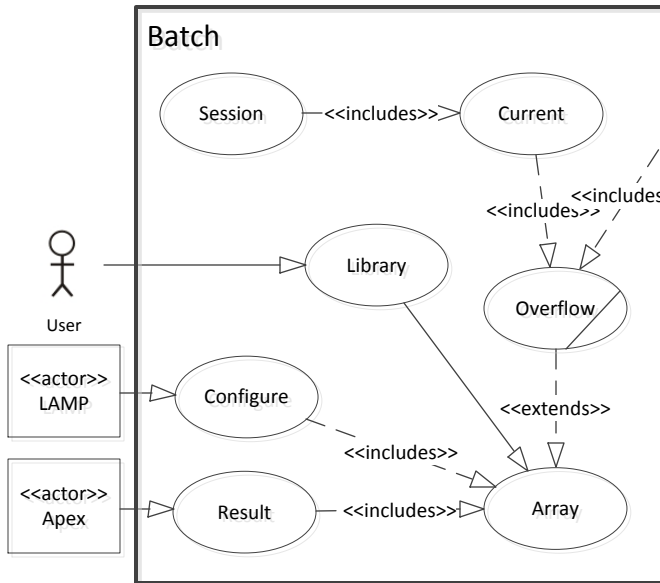


Count Use Case Details:

Client wants the **system** to use a simple script To count the items in an **Array** or **Result**.

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Use Case Diagram: Batch Process

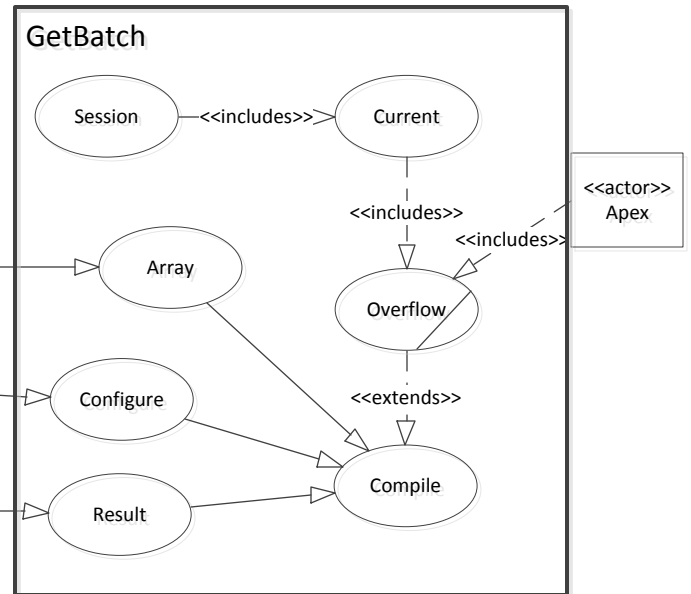


Batch Use Case Details:

Client wants the **system** to store, collect and manage artifacts from a specific **User (ODE)** to input into the **system**. The solution to this, short of building an expensive online tool, is to treat these artifacts as raw data in an **Array**.

In **Batch**, the **system** is automated to expect a collection of artifacts (XLS Documents) and a [brittle] expectation that those artifacts will be configured appropriately. The **system** makes a data call to the **MySQL** instance of the **LAMP**, as well as a data call to the **Apex system** to determine **default state**. The **Apex system** manages other sites for the **Client** and holds the **XML**-parsed files that the **mobile** apps use.

Batch will merge the **Artifacts**, and the **LAMP** and **Apex Data Calls items** into an **Array**. This **Array** is then measured by **Overflow** Use Case to measure file size. If file size exceeds parameters set by **Overflow**, the system will stop and reset. If file size is appropriate, then this **Array** will be passed to a Script, outlined in the **ODE XLS Batch Use Case**.

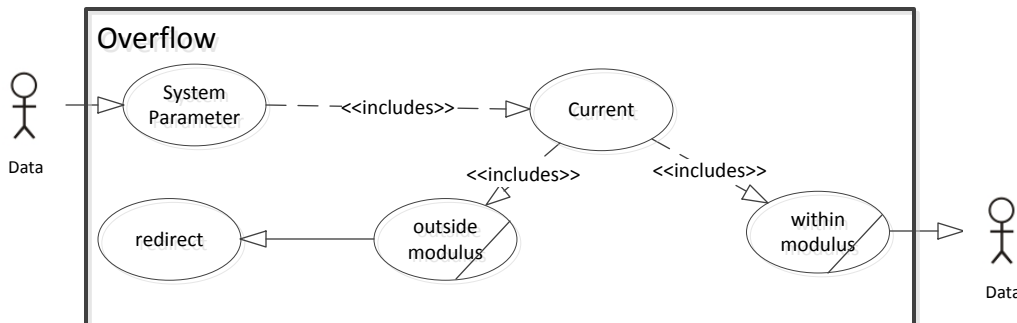


GetBatch Use Case Details:

Client wants the **system** to store, collect and manage data collected artifacts from **Batch** Use Case to input into the **Apex system** and stored as an **XML** artifact on the **Apex system** for use by **Mobile Apps**. The solution to this again, short of building an expensive online tool, is to treat these artifacts as raw data in an **Array**.

In **GetBatch**, the **system** is automated to expect a collection within an **Array**, and a **requirement** that the **Array** will be configured appropriately. The **system** makes a data call to the **MySQL** instance of the **LAMP**, as well as a data call to the **Apex system** to determine **default state**. The **Apex system** manages other sites for the **Client** and holds the **XML**-parsed files that the **mobile** apps use.

GetBatch will merge the **Array**, and the results of **Configure**, and **Result** into **Compile**. **Compile** is then measured by **Overflow** Use Case to measure file size. If file size exceeds parameters set by **Overflow**, the system will stop and reset. If file size is appropriate, then **Configure** results will be passed to a Script, outlined in the **ODE XML Batch Use Case**.

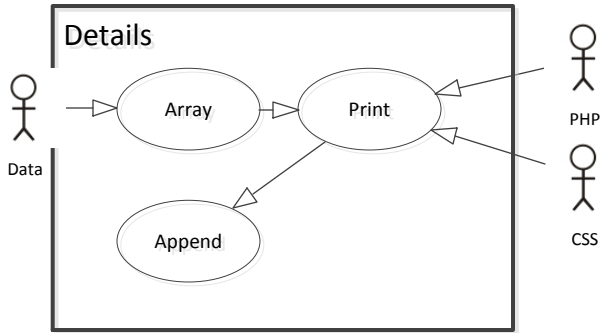


Overflow Use Case Details:

Client wants the **system** to offer a simple decision tree based on content file size limitations for its existing legacy data set.

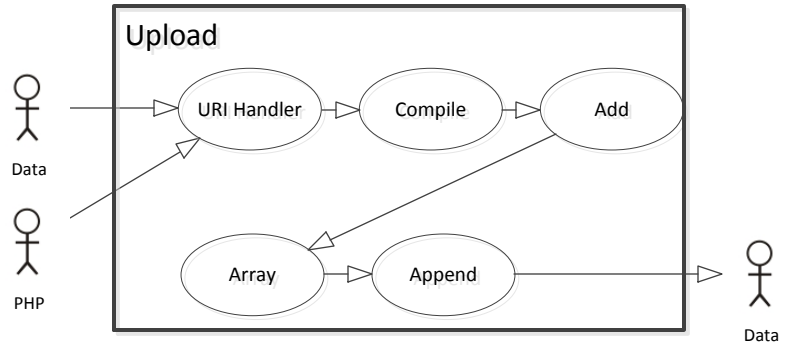
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Use Case Diagram: Various Use Cases



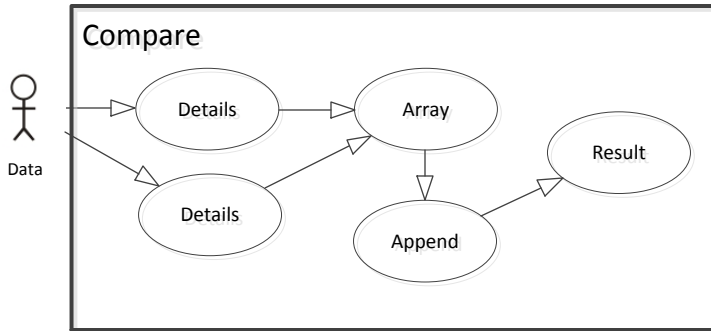
Details Use Case Details:

Client wants the **system** to display **Details** from any Use Case using the CSS and features of the page on which it is displayed. In addition Client wants **Details** to extend **Array** and **Result**.



Upload Use Case Details:

Client wants the **system** to display a PHP-Derived URI artifact upload object to create and **Append** an **Array** of Artifacts as a string.



Compare Use Case Details:

Client wants the **system** to display multiple options of data from the **system** and collect those discrete data streams in an **Array**. This **Array** is then used to extend **Results**.