KNOW IT
TECHNICAL REFERENCE MANNUAL

NANDA GUNDAPANENI

IOS APP

QR Code Scanner

The QR Code scanner used in the Know it app was built using the open source ZBar software development kit (http://zbar.sourceforge.net/). Once the view is loaded the camera view shows up and starts scanning any QR codes in its view. ZBar SDK also supports auto focus. Once a QR Code is scanned the location id is passed NSString variable.

XML Parser

Know It app uses the apple inbuilt NSXML parser to parse the details of location into the app. Once the QR Code is scanned the result is a unique id, which is passed as NSURL request to the web service and the web service returns an XML file, which is parsed, and Details are shown on a View. The details parsed from the web services include the Location ID, Location Name, Location History and paths to media files.

DATABASE

Once the XML is parsed the data is stored onto a internal database built using the apple inbuilt SQLITE(http://www.sqlite.org/) database tool. These details help the user to check his recently scanned location details internally without a network connection. The recent scans are shown from the internal database onto a UITableView.

IMAGE SCROLLER

Using the location ID and the NSXML parser the images of a location are loaded onto a UIImage which is viewed on UIImageView. The UIImageview is added as a subview on a UIScrollView to be able scroll horizontally to view multiple images.

MAP VIEW

The Map view was built using the Map kit framework from apple and map view pins are shown on a map using the location longitude and latitude.

AUTHORING TOOL

GENERATING QR CODE

DATABASE

The database tool used from building the On server database is MySQL(http://www.mysql.com/) developed by Oracle Inc.

AUTHORING TOOL

The Authoring tool has been developed on PHP a server side scripting language and CSS (Cascading Style Sheets).

GENERATING QR CODE

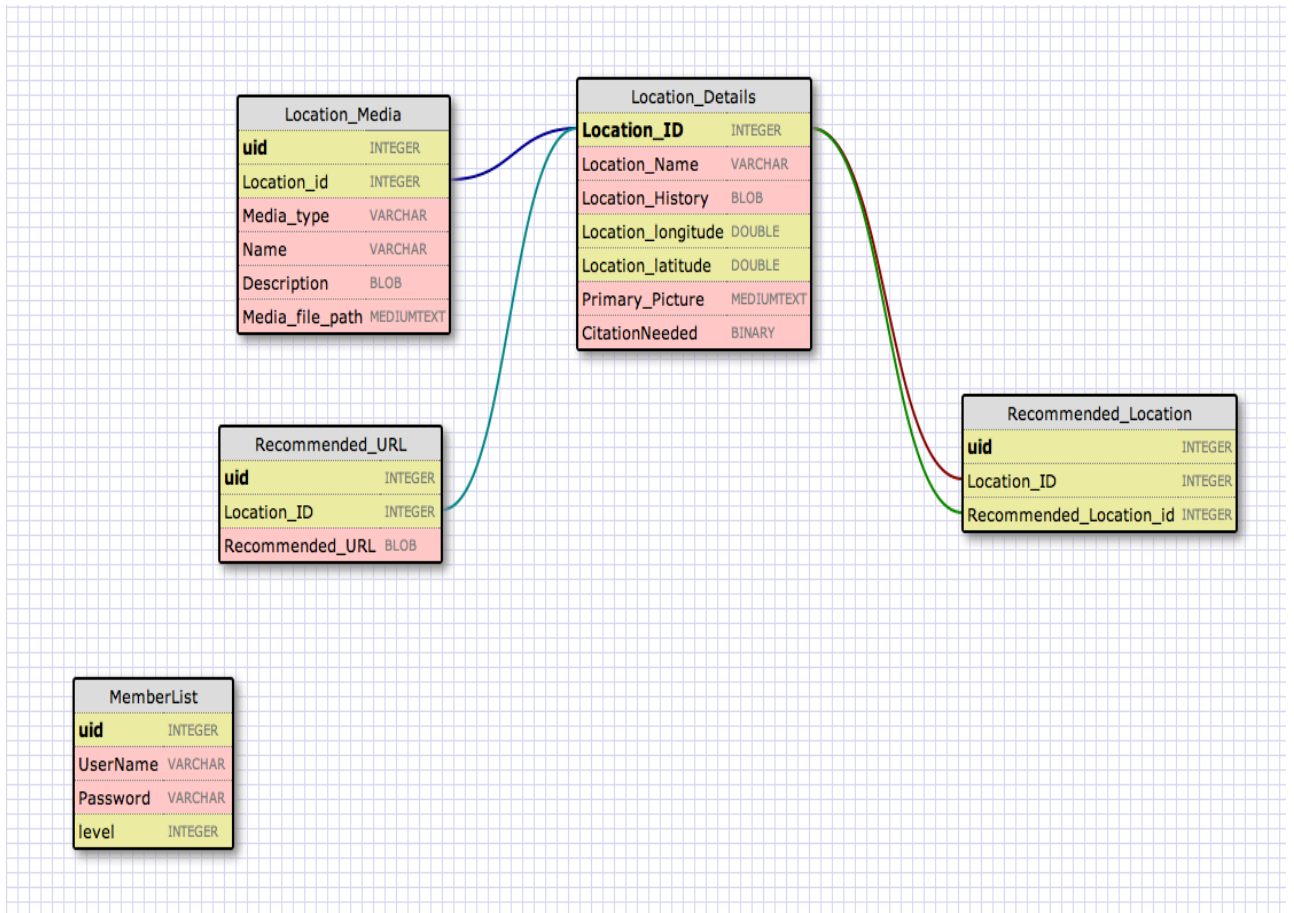The QR Codes have generated manually using the website http://qrcode.kaywa.com/ for the location id.

XML GENERATION

Using the PHP scripting XML files are generated based on the URL request from the IOS app, which XML's are then parsed by the app.

DATABASE SCHEMAS

EXTERNAL DATABASE

Location_Media

uid	INTEGER
Location_id	INTEGER
Media_type	VARCHAR
Name	VARCHAR
Description	BLOB
Media_file_path	MEDIUMTEXT

Location_Details

Location_ID	INTEGER
Location_Name	VARCHAR
Location_History	BLOB
Location_longitude	DOUBLE
Location_latitude	DOUBLE
Primary_Picture	MEDIUMTEXT
CitationNeeded	BINARY

Recommended_URL

uid	INTEGER
Location_ID	INTEGER
Recommended_URL	BLOB

Recommended_Location

uid	INTEGER
Location_ID	INTEGER
Recommended_Location_id	INTEGER

MemberList

uid	INTEGER
UserName	VARCHAR
Password	VARCHAR
level	INTEGER

INTERNAL DATABASE

RecenLocation

uid	INTEGER
Name	TEXT
History	TEXT
longitude	TEXT
latitude	TEXT