Models:

* Beacon: this class holds all of the information regarding the beacon used to sign in
  + String Name
  + Id // not necessary; usually set to null since the device ids cannot always be identified
  + String Course id – the course for which the beacon is set to
  + String Instructor name
  + String Address - the device address used for Bluetooth pairing
* BeaconSingleton: this is the singleton for accessing the list of possible beacons registered by a user. There is only one instance of this class, as it ensures that the entire app only references one set of beacons
  + mBeacons – array of Beacon objects
  + sBeacon – an instance of itself (beaconSingleton)
  + mAppContext – the context of the current application, required for instantiation
* Course: this class holds information pertaining to a specific course a user is registered
  + String className - name of the course
  + String instructorName – name of the course’s instructor
  + String dates – days that course meets e.g. Monday and Wednesday
  + String beaconName – name of beacon registered to the user
  + Map<Date, Boolean> daysPresent – local map using dates as keys and a Boolean of whether the student is present
* CourseSingleton: Similar to the BeaconSingleton, this class is used for accessing the list of courses local to the users phone (pulled from the database)
  + mCourses – array of course objects
  + sCourse – an instance of itself (courseSingleton)
  + mAppContext - the context of the current application, required for instantiation
* BluetoothSingleton: this class allows for consistent Bluetooth scanning across each activity of the device. It instantiates one Bluetooth adapter and receiver object for scanning and identifying the beacon.
  + BluetoothSingleton sBluetoothSingleton – This is the universal instantiation of itself
  + mAppContext - the context of the current application, required for instantiation
  + IntentFilter filter

View:

* CourseAdapter – this class is used to construct a custom list adapter for displaying the courses within an android listView object. This class is linked to the item\_course.xml layout file which contains 3 textView objects for displaying the course name, instructor name and date, and a checkbox object for the student’s attendance

Main Activity: This is the main activity/entry point for the application. It holds layouts for both the login screen and the registration screen; by default, the login screen is presented to the user first. The ‘register’ button hides the login layout, and inflates the registration layout. Forgot password directs the user to a page on the firebase website, which allows the user to change their password.