Report Homework 3:
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Main Activity:
The main activity displays the location latitude and longitude. The latitude and longitude values are obtained using LocationManager and Location Listener.
The address is obtained using the GeoCoder class, the GeoCoder class takes latitude and longitude as input and gives the address. The User can enter the name for the location before checking in. All these values are stored in the database when the user clicks 'CHECKIN' button.
The list view is then populated by these values from the database.
The user can set the automatic mode by clicking on the switch.
The locations are checked in automatically based on time 10 minutes or distance 100 meters.
There is a 'MAP'Button on the bottom. The user on clicking this button a map view with the checed in location are displayed on the map.

Map Activity:
The user can Zoom in, zoom out using the zoom buttons , which were created using UI settings. And the user can move the camera view to current location using 'location button' which was created using enable my location.
The user can add user defined locations by clicking on the map. These locations are not 'Checked in locations' and are indicated with blue marker, whereas the checked in locations are indicated with blue marker. The user can enter the name for the custom location onto the dialog box that pops up on clicking the map, this was made using alertdialog() and builder. These locations are saved into a different table in the database. Whenever the user comes within 30 meters of the checked in locations, the marker showwindow() is called, which displays the name of the location on the marker window, as the user moves away from the marker more than 30 meters the window closes.

Service Automatic:
The automatic service on being called, the onCreateCommand initializes the locationManager and locationListener. Two locationmanagers and 2 locationlisteners were used. One for detecting distance greater than 100 meters and the other for detecting time more than 10 minutes. On both these cases the location listener is called and the location is checkedin and is added to the database. The user when unclicks the automatic click button. The on destroy method is called where both the locationmanagers are also cleared by using removeUpdates().