

“A perfect app before moving in”



Powered by:



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Features

- **Allow user to input their apartment address**
- **Accommodate information for any apartment address in the world**
- **Calculate apartment rate (from 1 to 5) based on the distance criteria**
- **Calculate approximate distance from apartment to nearest bus stops,shops,atm,university,city center, restaurant, and hospitals**
- **Provide detail address and location of the nearest bus stops,shops,atm,university,city center, restaurant, and hospitals**

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Retrieve Lat Long

```
void Rating::beginRating(const QString address) {

    setMyBusStop(address);

    QString urlString = "http://nominatim.openstreetmap.org/search.php?q="+address+"&viewbox=28.13$2C61.05$2C28
//QString urlString = "http://www.google.com";

    //Getting the XML for the user's address
    manager = new QNetworkAccessManager(this);
    reply = manager->get(QNetworkRequest(urlString));
    QEventLoop loop;
    connect(reply, SIGNAL(finished()), &loop, SLOT(quit()));
    loop.exec();

    //Parsing the XML to get the coordinate of the user's address
    QDomDocument *doc = new QDomDocument();
    doc->setContent(reply);

    //Get the root element
    QDomElement docElem = doc->documentElement();
    QDomNodeList nodeList = docElem.elementsByTagName("place");

    //Check each node one by one.
    //for(int ii = 0;ii < nodeList.count(); ii++)
    for(int ii = 0;ii < 1; ii++)
    {
        QDomElement el = nodeList.at(ii).toElement();
        latit = el.attribute("lat");
        longit = el.attribute("lon");
    }

    setLatLong(latit+"|"+longit);
}
```

Retrieve ATM List

```
//within 500m
//1. Getting ATM list
QString atmString = "(node(around:500,\"+latit+\",\"+longit+\") [\"amenity\"=\"atm\"];>);out;";
atmString = "http://overpass.osm.rambler.ru/cgi/interpreter?data="+atmString;
//Getting the XML
//manager = new QNetworkAccessManager(this);
reply = manager->get(QNetworkRequest(atmString));
connect(reply, SIGNAL(finished()), &loop, SLOT(quit()));
loop.exec();

doc->setContent(reply);
//Get the root element
docElem = doc->documentElement();
nodeList = docElem.elementsByTagName("node");
if (nodeList.count()>0){
    //setAddressToRate("ada di <500m");
    theATM.score = "4";
    theATM.distance="500";

    // setAddressToRate("Score"+theATM.score);
    for(int ii=0;ii<nodeList.count();ii++){
        // get the current one as QDomElement
        QDomElement el = nodeList.at(ii).toElement();

        atmResult = atmResult+"$"+"lat:"+el.attribute("lat")+ "|lon:"+el.attribute("lon");
    }
    atmResult=atmResult+"|score:4|distance:500";
    atmResulti=4;
}else{
```

Rating Process

```
totalz = totalz + atmResulti +  
municipalityResulti+restaurantResulti + busStopResulti  
+ universityResulti+ smarketResulti + hospitalResulti;
```

```
totalz = qRound (totalz/7.0);  
if(busStopResulti==5) {  
    if(totalz<3){totalz=3;}}
```

```
QString overallRate = QString::number(totalz) ;
```

Reverse Geocode

```
QString Rating::getAddress(const QString lat,const QString longit)
{
    QString result="";
    QString reverseURL =
    "http://nominatim.openstreetmap.org/reverse?
    format=xml&lat="+lat+"&lon="+longit+"&zoom=18&addressdet
    ails=1"; QEventLoop loop;
    reply = manager->get(QNetworkRequest(reverseURL));
    connect(reply, SIGNAL(finished()), &loop, SLOT(quit()));
    loop.exec();
}
```

Demonstration

