

Mobile Part 2C : Steps required to parse XML retrieved from remote server

Using DOM Parser for XML parsing

- The content XML retrieved from step 2B is passed as input to the 2C

High Level outline of what the program is doing

- Get the retrieved XML content from Step 2C as a string
- Instantiate Document object by creating DocumentBuilder and DocumentBuilderFactory classes
- Using the Document object parse through the XML content
- Get all the Element with tag "result"(specific to the XML i used)
- For each result element extract name and score sub elements and store them in an array list.
- Pass this array list as an input to the next activity so that it displays the results in user required format

Sample code for parsing through retrieved XML

```
ArrayList<String> results = new ArrayList<String>();
    String name,score;

DocumentBuilderFactory factory = DocumentBuilderFactory.newInstance();
    try {
        DocumentBuilder builder = factory.newDocumentBuilder();
        Document dom = builder.parse(new InputSource(new
ByteArrayInputStream(response.getBytes("utf-8"))));
        Element root = dom.getDocumentElement();
        NodeList items = root.getElementsByTagName("result");

        for (int i=0;i<items.getLength();i++){
            Node item = items.item(i);

            if (item.getNodeType() == Node.ELEMENT_NODE) {
                Element eElement = (Element) item;
                name = getTagValue("name", eElement);
                score = getTagValue("score", eElement);
                results.add(name);
                results.add(score);
            }
        }
    }
    catch (Exception e)
    {
        throw new RuntimeException(e);
    }
    return results;
```

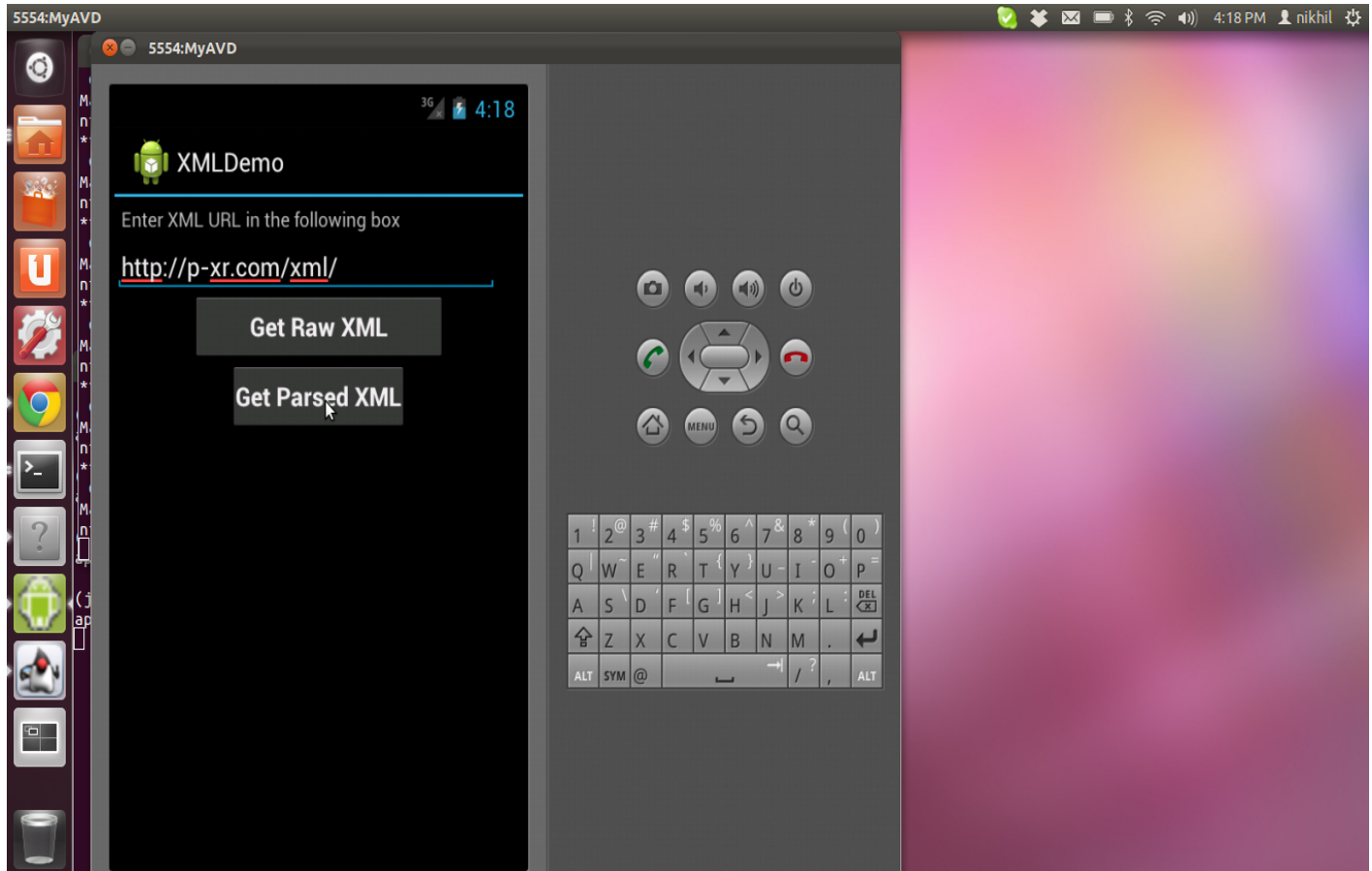
Sending the Results to the next Activity

```
getParsedContent = (Button)this.findViewById(R.id.getParsedContent);
getParsedContent.setOnClickListener(new OnClickListener()
{
    public void onClick(View v)
    {
        String results =
getParsedResults(xmlurl.getText().toString());
        Intent parsedResultsScreen = new
Intent(getApplicationContext(),ParsedResultsActivity.class);
        parsedResultsScreen.putExtra("parsedresults", results);
        startActivity(parsedResultsScreen);
    }
});
```

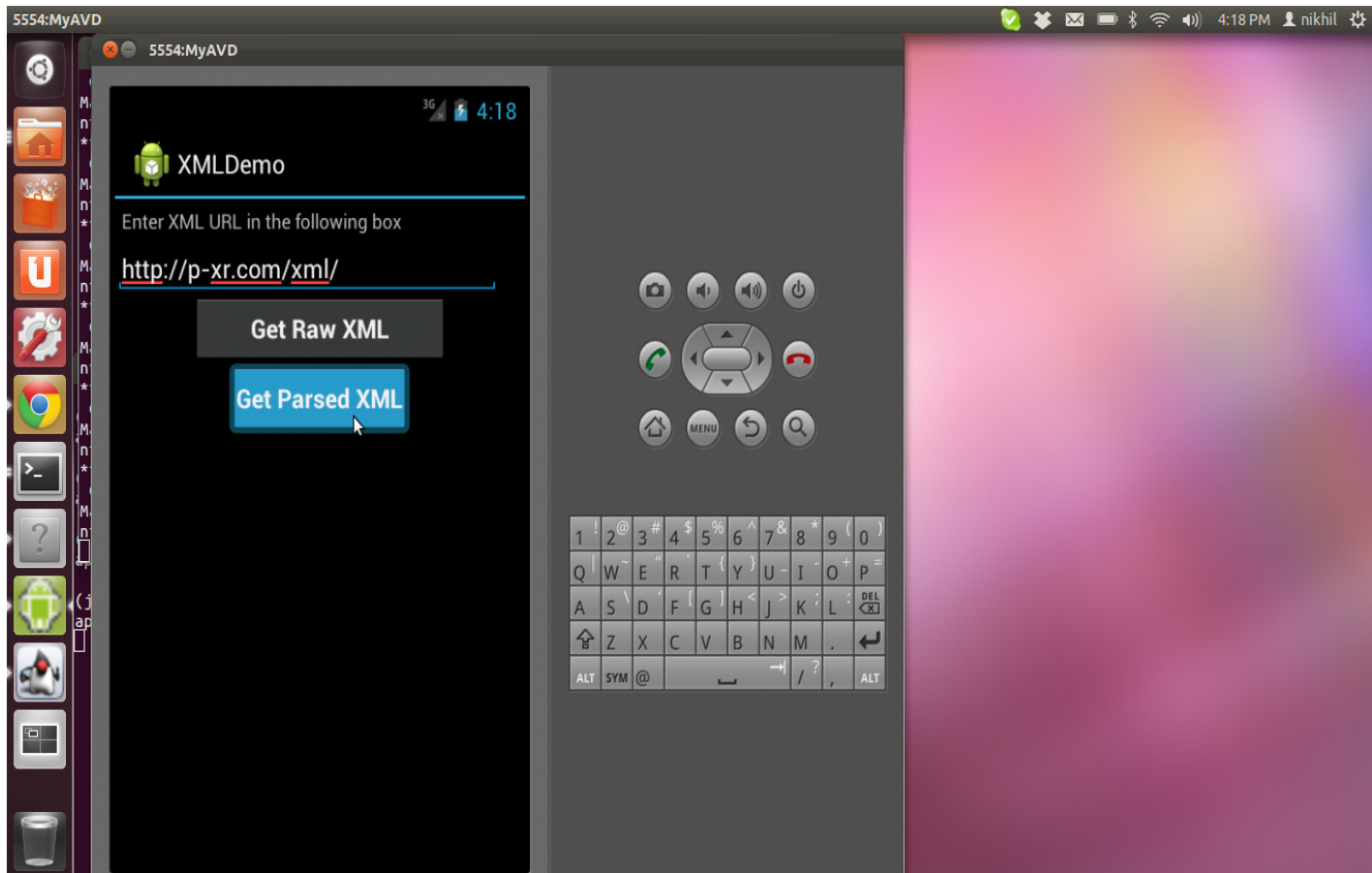
Visual Depiction of Parsing XML results

1. Initial Screen

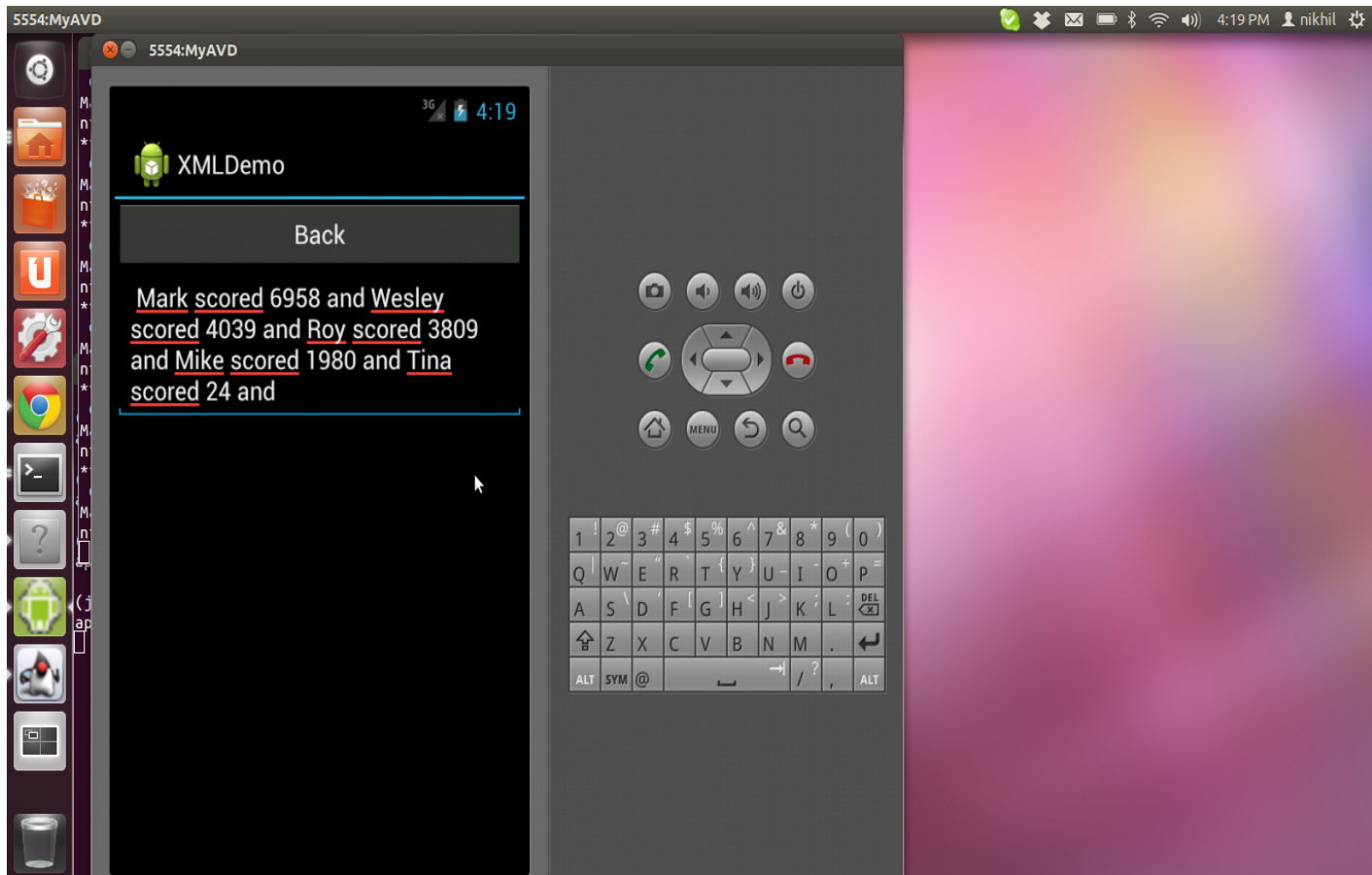
(After running the code, type the url (<http://p-xr.com/xml/>) into the input box and press "**Get Parsed XML**" button)



2. Hit "Get Parsed XML" to view the parsed XML



3. Seeing the Parsed XML



4. Hit the Back Button to get back to the initial Screen

