

Category Server

This is a simple server which provides for categorization of apps. The objective of the system is to provide a consistent mechanism to all systems to determine the category of a particular app given the package name. The categories of apps need to be determined by using the package name and querying from Google Play (GP). Unfortunately GP does not provide any API, so it will need to be scraped from the GP page of the app. The GP page for any app is <https://play.google.com/store/apps/details?id=<package name of the app>>. For example, the GP page of WhatsApp is <https://play.google.com/store/apps/details?id=com.whatsapp> where 'com.whatsapp' is the package name of the app. The category for Whatsapp on Communications. And for that the corresponding category that we should consider is "Social". The below list gives the mapping between the categories on GP and our own categories -

Category Mapping Table

| GP Category | Our Category |
|--------------------|--------------|
| Finance | Finance |
| Action | Games |
| Action & Adventure | Games |
| Adventure | Games |
| Arcade | Games |
| Board | Games |
| Brain | Games |
| Brain Games | Games |
| Card | Games |
| Casino | Games |
| Educational | Games |
| Music | Games |
| Pretend | Games |
| Pretend play | Games |
| Puzzle | Games |
| Racing | Games |
| Role | Games |
| Role Playing | Games |
| Simulation | Games |
| Strategy | Games |
| Trivia | Games |

| | |
|-------------------------|-----------------|
| Word | Games |
| Auto & Vehicles | Lifestyle |
| Beauty | LifeStyle |
| Casual | Lifestyle |
| Dating | Lifestyle |
| Food & Drink | Lifestyle |
| Health | Lifestyle |
| Health & Fitness | Lifestyle |
| House & Home | Lifestyle |
| Lifestyle | Lifestyle |
| Medical | Lifestyle |
| Parenting | Lifestyle |
| Sports | Lifestyle/Games |
| Entertainment | Media |
| Music & Audio | Media |
| Music and video | Media |
| Photography | Media |
| Video | Media |
| Video Players & Editors | Media |
| Books | News & Books |
| Books & Reference | News & Books |
| Comics | News & books |
| Education | News & Books |
| Libraries | News & BOoks |
| News | News & Books |
| News & Magazines | News & books |
| Shopping | Shopping |
| Communication | Social |
| Social | Social |
| Art & Design | Tools |
| Business | Tools |
| Creativity | Tools |
| Events | Tools |

| | |
|-------------------|--------|
| Libraries & Demo | Tools |
| Personalisation | Tools |
| Productivity | Tools |
| Tools | Tools |
| Weather | Tools |
| Maps | Travel |
| Maps & Navigation | Travel |
| Travel | Travel |
| Travel & Local | Travel |

The following APIs must be exposed out by the server.

/syncTopPackagesCategories

Request Type - POST

Gives the list of package added in **top** application list since last timestamp. Gives the entire list if there is no timestamp. We will initially seed it with a list of 10000 apps along with their categories.

Request body parameters to be sent as JSON in POST body.

| | |
|-------------|---|
| locale_code | Current locale of the device |
| time_stamp | Timestamp provided by server for the last request |

Sample request body

```
{
  "locale_code": "en",
  "time_stamp": "1477308028"
}
```

Response body parameters

| | |
|-------------------|--|
| time_stamp | Timestamp provided for current request |
| packages_added | List of packages along with category_id and category name added since last time stamp |
| packages_modified | List of packages along with category_id and category name modified since last time stamp |
| packages_removed | List of packages along with category_id and category name removed since last time stamp |

Sample response body

```
{
  "time_stamp": "1477308028",
  "packages_added": [{
    "package_name": "cn.xender",
    "category_id": "800",
    "category_name": "Tools"
  }, {
    "package_name": "com.myntra.android",
    "category_id": "600",
    "category_name": "Shopping"
  }, {
    "package_name": "com.imangi.templerun",
    "category_id": "200",
    "category_name": "Games"
  }, {
    "package_name": "com.ixigo.train.ixitrain",
    "category_id": "900",
    "category_name": "Travel"
  }],
  "packages_modified": [],
  "packages_removed": [{
    "package_name": "com.acrosoft.sajupedia",
    "category_id": "400",
    "category_name": "Media"
  }, {
    "package_name": "com.imviha.yogasan",
    "category_id": "300",
    "category_name": "Lifestyle"
  }, {
```

```

        "package_name": "com.libiitech.nailsalon",
        "category_id": "300",
        "category_name": "Lifestyle"
    }, {
        "package_name": "com.hsbsoftwaresolution.hairstyle",
        "category_id": "300",
        "category_name": "Lifestyle"
    }]
}

```

/categoryForPackage

Request Type - POST

Gives the category for a given package. This is supposed to first check for the same in the DB of the server and if not found scrape it from GP and then return the category. All categories once scraped must also be stored in server DB.

Request body parameter to sent as JSON in POST body

| | |
|--------------|--|
| package_name | Package name of application whose category is to be determined |
| locale_code | Current locale of device |

Sample Request body

```

{
    "package_name": "com.octro.teenpattilive",
    "locale_code": "en"
}

```

Response body parameters

| | |
|--------------|---|
| package_name | Package name of application installed on device |
|--------------|---|

| | |
|---------------|-------------------------------------|
| category_id | Category id to which package belong |
| category_name | Name of category in given locale |

Sample response body

```
{
  "package_name": "com.octro.teenpattilive",
  "category": "200",
  "category_name": "Games"
}
```

/categoryList

Request Type - POST

Gives the master list of categories into which application can be categorized. The current set of categories will be as per the right column in the category mapping table above. All categories along with their corresponding localized names will be provided.

Request body parameters to be sent as JSON in POST body

| | |
|-------------|------------------|
| locale_code | Locale of device |
|-------------|------------------|

```
{
  "locale_code": "en"
}
```

Response body for list of categories

| | |
|----------------|---|
| category_id | Category id provided by server |
| category_names | List of category name in different locale |

Sample response body

```
{
  "100": [{
    "as": "Finance",
    "bn": "Finance",
    "en": "Finance",
    "gu": "Finance",
    "hi": "Finance",
    "kn": "Finance",
    "ml": "Finance",
    "mr": "Finance",
    "or": "Finance",
    "pa": "Finance",
    "ta": "Finance",
    "te": "Finance",
    "ur": "Finance"
  }],
  "200": [{
    "as": "Games",
    "bn": "Games",
    "en": "Games",
    "gu": "Games",
    "hi": "Games",
    "kn": "Games",
    "ml": "Games",
    "mr": "Games",
    "or": "Games",
    "pa": "Games",
    "ta": "Games",
    "te": "Games",
    "ur": "Games"
  }],
  "300": [{
    "as": "Lifestyle",
    "bn": "Lifestyle",
    "en": "Lifestyle",
    "gu": "Lifestyle",
    "hi": "Lifestyle",
    "kn": "Lifestyle",
    "ml": "Lifestyle",
```

```
        "mr": "Lifestyle",
        "or": "Lifestyle",
        "pa": "Lifestyle",
        "ta": "Lifestyle",
        "te": "Lifestyle",
        "ur": "Lifestyle"
    }],
    "400": [{
        "as": "Media",
        "bn": "Media",
        "en": "Media",
        "gu": "Media",
        "hi": "Media",
        "kn": "Media",
        "ml": "Media",
        "mr": "Media",
        "or": "Media",
        "pa": "Media",
        "ta": "Media",
        "te": "Media",
        "ur": "Media"
    }],
    "500": [{
        "as": "News & Books",
        "bn": "News & Books",
        "en": "News & Books",
        "gu": "News & Books",
        "hi": "News & Books",
        "kn": "News & Books",
        "ml": "News & Books",
        "mr": "News & Books",
        "or": "News & Books",
        "pa": "News & Books",
        "ta": "News & Books",
        "te": "News & Books",
        "ur": "News & Books"
    }],
    "600": [{
        "as": "Shopping",
        "bn": "Shopping",
        "en": "Shopping",
        "gu": "Shopping",
        "hi": "Shopping",
```



```
        "kn": "Shopping",
        "ml": "Shopping",
        "mr": "Shopping",
        "or": "Shopping",
        "pa": "Shopping",
        "ta": "Shopping",
        "te": "Shopping",
        "ur": "Shopping"
    }],
    "700": [{
        "as": "Social",
        "bn": "Social",
        "en": "Social",
        "gu": "Social",
        "hi": "Social",
        "kn": "Social",
        "ml": "Social",
        "mr": "Social",
        "or": "Social",
        "pa": "Social",
        "ta": "Social",
        "te": "Social",
        "ur": "Social"
    }],
    "800": [{
        "as": "Tools",
        "bn": "Tools",
        "en": "Tools",
        "gu": "Tools",
        "hi": "Tools",
        "kn": "Tools",
        "ml": "Tools",
        "mr": "Tools",
        "or": "Tools",
        "pa": "Tools",
        "ta": "Tools",
        "te": "Tools",
        "ur": "Tools"
    }],
    "900": [{
        "as": "Travel",
        "bn": "Travel",
        "en": "Travel",
```

```

        "gu": "Travel",
        "hi": "Travel",
        "kn": "Travel",
        "ml": "Travel",
        "mr": "Travel",
        "or": "Travel",
        "pa": "Travel",
        "ta": "Travel",
        "te": "Travel",
        "ur": "Travel"
    }],
    "1000": [{
        "as": "Others",
        "bn": "Others",
        "en": "Others",
        "gu": "Others",
        "hi": "Others",
        "kn": "Others",
        "ml": "Others",
        "mr": "Others",
        "or": "Others",
        "pa": "Others",
        "ta": "Others",
        "te": "Others",
        "ur": "Others"
    }]
}

```

/updateTopPackagesList

Request Type - POST

Updates the top packages list maintained on server as per the list of packages provided in the request. This is supposed to mark any existing TOP packages not provided in the request as deleted, make appropriate additions if there are new ones and mark any modifications by updating the modification time stamps. This is also supposed to fetch the GP category of all these apps once again to ensure that the proper category of the app is maintained in the server's database.

Request body parameters to be sent as JSON in POST body

| | |
|----------|--|
| packages | List of packages to be updated on server |
|----------|--|

Sample request body

```
{
  "packages": [
    "com.softwego.lockscreen",
    "us.screen.recorder",
    "com.hp.hp12c",
    "com.NatAguilar.settechnician",
    "net.ddroid.sw2.wface.model",
    "com.bykup",
    "com.meamobile.iSupr8",
    "com.dunitiapps.cast.snow",
    "com.rayy.android.smseditor",
    "com.antutu.benchmark.full",
    "com.drakema138.carma",
    "com.instudios.ksrtcon",
    "net.pecoranera.kokorozashifull",
    "air.com.bossastudios.ddd.paid",
    "com.swarooptech.bills",
    "jp.wasabeef.example.recyclerview",
    "com.sasyabook.mctpro",
    "com.aditinakta.sruthibox",
    "com.creativityknowledgeapp.howtoswimandtechniqueapp",
    "com.indianslivesportsatel.jkbmlvm",
    "com.gamebaby.dietplanweightloss7days",
    "com.Lock.Wallpapers.LockUtilsLockScreen"
  ]
}
```

Response parameters

| | |
|---------|--|
| status | HTTP code to inform about status |
| message | Message corresponding to given request |

Sample response body

```
{
  "status": "200",
  "message": "Package update is successful"
```

}