**1. BadaTime Tide Forecast Service**

I. API Service Overview

|  |  |  |
| --- | --- | --- |
| **API Service Name** | **API Name** | BadaTime Tide Information Service |
| **API Description** | Service to query tide times and high/low tide schedules for specific regions |
| **API Service**  **Security Implementation**  **Technical Level** | **Service Authentication/Authorization** | ServiceKey |
| **Interface Standard** | REST (GET) |
| **Data Exchange Standard** | JSON |
| **API Service** | **Service URL** | https://www.badatime.com/DIVE/tide.jsp |
| **Data Update Cycle** | Daily (Within 1 Day Data) |

II. API Detailed Functions

a. Detailed Function Information

|  |  |
| --- | --- |
| **Detailed Function Name** | BadaTime Tide Service |
| **Detailed Function Description** | Uses latitude and longitude of a specific region to query the nearest tide region serviced by BadaTime, and retrieves information including daily high/low tide times, water height from approximate lowest low tide level, sunrise/sunset times, moonrise/moonset times for that region (\*Provides 7 days of data) |

b. Request Message Specification

|  |  |  |
| --- | --- | --- |
| **Request Field** | **Item Name** | **Item Description** |
| ServiceKey | Authentication Key | Authentication key provided by our company |
| lat | Latitude | Latitude |
| lon | Longitude | Longitude |
| area | Region ID | Can request using BadaTime's ID number instead of latitude/longitude |

c. Response Message Specification

|  |  |  |
| --- | --- | --- |
| **Response Field** | **Item Name** | **Item Description** |
| pThisDate | Date | (ex. Year-Month-Day-Day of Week-Lunar Month-Lunar Day) |
| pName | Region Name |  |
| pArea | Region ID |  |
| pMul | Tide Phase | 8-phase system: 113 phases, neap tide, slack tide |
| pSun | Sunrise/Sunset | Sunrise/sunset times |
| pMoon | Moonrise/Moonset | Moonrise/moonset times |
| jowi1 | High/Low Tide Time 1 | High/low tide times provided in chronological order.  ▲ in data indicates high tide / ▼ indicates low tide  Numbers in "( )" parentheses are water height in **cm**  (ex. 09:18 (522) ▲ or 14:43 (-23) ▼) |
| jowi2 | High/Low Tide Time 2 |
| jowi3 | High/Low Tide Time 3 |
| jowi4 | High/Low Tide Time 4 |

d) Request/Response Message Examples

|  |
| --- |
| **Request Message** |
| https://www.badatime.com/DIVE/tide.jsp?userId=CompanyProvided&lat=35.10&lon=129.03 |
| **Response Message** |
| {  {  "pThisDate": "2025-7-21-Mon-6-27",  "pName": "Busan",  "pArea": "1",  "pMul": "4th tide",  "pSun": "05:51/19:00",  "pMoon": "07:32/19:59",  "jowi1": "03:10 (17) ▼ -13",  "jowi2": "09:36 (127) ▲ +46",  "jowi3": "15:26 (21) ▼ -1",  "jowi4": "21:45 (136) ▲ +54"  },  ........  {  "pThisDate": "2025-7-27-Sun-6-3",  "pName": "Busan",  "pArea": "1",  "pMul": "10th tide",  "pSun": "05:29/19:32",  "pMoon": "07:43/21:09",  "jowi1": "03:39 (18) ▼ -119",  "jowi2": "10:05 (122) ▲ +103",  "jowi3": "15:54 (22) ▼ -100",  "jowi4": "22:18 (135) ▲ +113"  }  } |

**2. BadaTime Current Weather Service**

I. API Service Overview

|  |  |  |
| --- | --- | --- |
| **API Service Name** | **API Name** | BadaTime Current Weather Information Service |
| **API Description** | Service to query current weather data for specific regions |
| **API Service**  **Security Implementation**  **Technical Level** | **Service Authentication/Authorization** | ServiceKey |
| **Interface Standard** | REST (GET) |
| **Data Exchange Staandard** | JSON |
| **API Service** | **Service URL** | https://www.badatime.com/DIVE/today\_weather.jsp |
| **Data Update Cycle** | Updated every hour |

II. API Detailed Functions

a. Detailed Function Information

|  |  |
| --- | --- |
| **Detailed Function Name** | BadaTime Tide Service |
| **Detailed Function Description** | Uses latitude and longitude of a specific region to query the nearest tide region serviced by BadaTime, and retrieves information including daily high/low tide times, water height from approximate lowest low tide level, sunrise/sunset times, moonrise/moonset times for that region (\*Provides 7 days of data) |

b. Request Message Specification

|  |  |  |
| --- | --- | --- |
| **Request Field** | **Item Name** | **Item Description** |
| ServiceKey | Authentication Key | Authentication key provided by our company |
| lat | Latitude | Latitude |
| lon | Longitude | Longitude |

c. Response Message Specification

|  |  |  |
| --- | --- | --- |
| **Response Field** | **Item Name** | **Item Description** |
| aplYmdt | Date | 2025072113 |
| sky | Weather | Clear |
| sky\_code | Weather Status Code | \* To be provided later |
| rain | 1-Hour Precipitation (mm) | 0.0 |
| temp | Temperature (C) | 27.5 |
| winddir | Wind Direction | SW ( \* Refer to 8-direction compass) |
| windspd | Wind Speed | 5.0 |
| pago | Wave Height (m) | 1.8 |
| humidity | Humidity (%) | 60 |

d) Request/Response Message Examples

|  |
| --- |
| **Request Message** |
| https://www.badatime.com/DIVE/today\_weather.jsp?userId=CompanyProvided&lat=35.10&lon=129.03 |
| **Response Message** |
| {  {  "head": {  "fcastYmdt": "20250721130000",  "type": "now"  },  "body": {  "weather": [  {  "aplYmdt": "2025072113",  "sky": "Clear",  "sky\_code": "1",  "rain": "0.0",  "temp": "30.6",  "winddir": "S",  "windspd": "5.8",  "pago": "0.29",  "humidity": "75.0"  },  .......    {  "aplYmdt": "2025072119",  "sky": "Clear",  "sky\_code": "1",  "rain": "0.0",  "temp": "27.0",  "winddir": "S",  "windspd": "1.9",  "pago": "0.34",  "humidity": "80.0"  }  ],  "info": {  "city": "Jung-gu, Jungang-dongm Busan Metropolitan City",  "cityCode": "2611051000"  }  }  } |

**3. BadaTime Detailed Weather Service**

I. API Service Overview

|  |  |  |
| --- | --- | --- |
| **API Service Name** | **API Name** | BadaTime Hourly Weather Information Service |
| **API Description** | Service to query 7-day weather data for specific regions |
| **API Service**  **Security Implementation**  **& Technical Level** | **Service Authentication** | ServiceKey |
| **Interface Standard** | REST (GET) |
| **Data Exchange Standard** | JSON |
| **API Service** | **Service URL** | https://www.badatime.com/DIVE/day7\_weather.jsp |
| **Data Update Cycle** | Updated every 3 hours |

II. API Detailed Functions

a. Detailed Function Information

|  |  |
| --- | --- |
| **Detailed Function Name** | BadaTime Hourly Weather Information Service |
| **Detailed Function Description** | Uses current location's latitude and longitude to provide 10-day weather information from today's date for that position. Provides basic weather information including temperature, precipitation, humidity, along with wind direction, wind speed, wave height, wave direction, and wave period information (\*Provides weather data for 7 days starting from 00:00 of current date, with weather data provided every 3 hours) |

b. Request Message Specification

|  |  |  |
| --- | --- | --- |
| **Request Field** | **Item Name** | **Item Description** |
| ServiceKey | Authentication Key | Authentication key provided by our company |
| lat | Latitude | Latitude |
| lon | Longitude | Longitude |

c. Response Message Specification

|  |  |  |
| --- | --- | --- |
| **Response Field** | **Item Name** | **Item Description** |
| aplYmdt | Date | 2025072113 |
| sky | Weather Status | Clear |
| skycode | Weather Status Code | \* To be provided later |
| rain | Precipitation Probability (%) | 20 |
| rainAmt | Precipitation Amount (mm) | 0.0 |
| temp | Temperature (℃) | 18 |
| winddir | Wind Direction | SW ( \* Refer to 8-direction compass ) |
| windspd | Wind Speed (m/s) | 2.8 |
| humidity | Humidity (%) | 60 |
| wavePrd | Wave Period (seconds) | 7.22 |
| waveHt | Wave Height (m) | 0.8 |
| waveDir | Wave Direction | SSE ( \* Refer to 16-direction compass ) |

d) Response/Request Message Examples

|  |
| --- |
| **Request Message** |
| https://www.badatime.com/DIVE/day7\_weather.jsp?userId=CompanyProvided&lat=35.10&lon=129.03 |
| **Response Message** |
| {  {  "weather": [  {  "sky": "Clear",  "windspd": "1.0",  "wavePrd": "7.22",  "rain": "0",  "temp": "26",  "rainAmt": "0.0",  "aplYmdt": "2025072400",  "humidity": "91",  "winddir": "NE",  "waveHt": "0.20",  "waveDir": "SSW",  "sky\_code": "1"  },  {  "sky": "Clear",  "windspd": "1.8",  "wavePrd": "7.19",  "rain": "0",  "temp": "26",  "rainAmt": "0.0",  "aplYmdt": "2025072403",  "humidity": "85",  "winddir": "N",  "waveHt": "0.18",  "waveDir": "SSW",  "sky\_code": "1"  },  .................................................  {  "sky": "Clear",  "windspd": "2.2",  "wavePrd": "5.5",  "rain": "0",  "temp": "30",  "rainAmt": "0.0",  "aplYmdt": "2025080218",  "humidity": "57",  "winddir": "SE",  "waveHt": "1.2",  "waveDir": "ENE",  "sky\_code": "1"  },  {  "sky": "Partly Cloudy",  "windspd": "0.6",  "wavePrd": "8",  "rain": "10",  "temp": "28",  "rainAmt": "0.0",  "aplYmdt": "2025080221",  "humidity": "74",  "winddir": "E",  "waveHt": "0.94",  "waveDir": "ENE",  "sky\_code": "2"  },  {  "sky": "Clear",  "windspd": "1.3",  "wavePrd": "8.25",  "rain": "0",  "temp": "27",  "rainAmt": "0.0",  "aplYmdt": "2025080300",  "humidity": "75",  "winddir": "E",  "waveHt": "0.86",  "waveDir": "ENE",  "sky\_code": "1"  }  ],  "info": {  "cityCode": "2611051000"  }  } |

**4. BadaTime Sea Temperature Service**

I. API Service Overview

|  |  |  |
| --- | --- | --- |
| **API Service Name** | **API Name** | BadaTime Sea Temperature Information Service |
| **API Description** | Service to query current sea temperature information for specific regions |
| **API Service**  **Security Implementation & Technical Specification** | **Service Authentication** | ServiceKey |
| **Interface Standard** | REST (GET) |
| **Data Exchange Standard** | JSON |
| **API Service** | **Service URL** | https://www.badatime.com/DIVE/bada\_temp.jsp |
| **Data Update Cycle** | Updated every hour |

II. API Detailed Functions

a. Detailed Function Information

|  |  |
| --- | --- |
| **Detailed Function Name** | BadaTime Current Sea Temperature Information Service |
| **Detailed Function Description** | Uses current location's latitude and longitude to provide current sea temperature information according to the position |

b. Request Message Specification

|  |  |  |
| --- | --- | --- |
| **Request Field** | **Item Name** | **Item Description** |
| ServiceKey | Authentication Key | Authentication key provided by our company |
| lat | Latitude | Latitude |
| lon | Longitude | Longitude |

c. Response Message Specification

|  |  |  |
| --- | --- | --- |
| **Response Field** | **Item Name** | **Item Description** |
| lat | Latitude |  |
| lon | Longitude |  |
| obs\_time | Observation Time | 2025-07-21 13:00 |
| obs\_name | Observatory Name | Busan |
| obs\_wt | Sea Temperature (℃) | 21.0 |
| obs\_dt | Distance between current location and observatory | m if less than 1km  1km if more (\*kilometers increase in single digits) |

d. Request/Response Message Examples

|  |
| --- |
| **Request Message** |
| https://www.badatime.com/DIVE/bada\_temp.jsp?userId=CompanyProvided&lat=35.10&lon=129.03 |
| **Response Message** |
| **{**  {  "lat": "35.09628",  "lon": "129.0354",  "obs\_name": "Busan",  "obs\_time": "2025-07-24 17:00",  "obs\_dt": "8 km"  },  {  "lat": "35.14889",  "lon": "129.1697",  "obs\_name": "Haeundae",  "obs\_time": "2025-07-24 17:00",  "obs\_dt": "8 km"  },  {  "lat": "35.09175",  "lon": "129.0853",  "obs\_name": "Busan Port",  "obs\_time": "2025-07-24 17:00",  "obs\_dt": "8 km"  },  {  "lat": "35.162",  "lon": "129.2157",  "obs\_name": "SongJeong",  "obs\_time": "2025-07-24 17:00",  "obs\_dt": "12 km"  },  {  "lat": "35.187",  "lon": "129.227",  "obs\_name": "Gijang",  "obs\_time": "2025-07-24 17:00",  "obs\_dt": "13 km"  } |

**5. BadaTime Marine Fishing Point Service**

I. API Service Overview

|  |  |  |
| --- | --- | --- |
| **API Service Name** | **API Name** | BadaTime Marine Fishing Point Information Service |
| **API Description** | Service to query fishing point information for specific areas |
| **API Service Security Implementation & Technical Details** | **Service Authentication** | ServiceKey |
| **Interface Standard** | REST (GET) |
| **Data Exchange Standard** | JSON |
| **API Service** | **Service URL** | https://www.badatime.com/DIVE/point.jsp |
| **Data Update Cycle** | Static Data |

II. API Detailed Functions

a. Detailed Function Information

|  |  |
| --- | --- |
| **Detailed Function Name** | BadaTime Marine Fishing Point Information Service |
| **Detailed Function Description** | Uses current location's latitude and longitude to provide the nearest fishing points according to the position |

b. Request Message Specification

|  |  |  |
| --- | --- | --- |
| **Request Field** | **Item Name** | **Item Description** |
| ServiceKey | Authentication Key | Authentication key provided by our company |
| lat | Latitude | Latitude |
| lon | Longitude | Longitude |

c. Response Message Specification

|  |  |  |
| --- | --- | --- |
| **Response Field** | **Item Name** | **Item Description** |
| name | Region Name |  |
| point\_nm | Point Name |  |
| dpwt | Water Depth |  |
| material | Bottom Type |  |
| tide\_time | Optimal Tide Time |  |
| target | Point Fish Species |  |
| lat | Latitude |  |
| lon | Longitude |  |
| photo | Point Photo | \* Images provided within BadaTime itself |
| addr | Address |  |
| seaside | y/n | If data value is "y" then rocky shore, if "n" then boat fishing |
| intro | Region Introduction |  |
| forecast | Weather Forecast |  |
| ebbf | Tidal Current |  |
| notice | Precautions |  |
| wtemp\_sp | Seasonal Average Water Temperature | Spring |
| wtemp\_su | Summer |
| wtemp\_fa | Autumn |
| wtemp\_wi | Winter |
| fish\_sp | Seasonal Main Fish Species | Spring |
| ish\_su | Summer |
| fish\_fa | Autumn |
| fish\_wi | Winter |
| point\_dt | Distance between current location and point | m if less than 1km, 1km if more (\*kilometers increase in single digits) |

d) Request/Response Message Examples

|  |
| --- |
| **Request Message** |
| https://www.badatime.com/DIVE/point.jsp?userId=CompanyProvided&lat=35.10&lon=129.03 |
| **Response Message** |
| {  {  {  "name": "Near Yeonhwa Island",  "point\_nm": "Near Hansum Point",  "dpwt": "3.9~8.4m",  "material": "Rock",  "tide\_time": "Early flood tide, early ebb tide, 5th~6th tide, neap tide",  "target": "Red sea bream - float fishing, diving ▶ Black porgy - float fishing, pole, surfcasting ▶ Rockfish - float fishing, pole, lure ▶ Largescale blackfish - leader line, pole, float fishing, diving ▶ Sea bass - lure, float fishing",  "lat": "34.64098028",  "lon": "128.35788140",  "photo": "356.JPEG",  "addr": "Tongyeong-si, Gyeongsangnam-do",  "seaside": "y",  "intro": "The main fish species near Yeonhwa Island include red sea bream, black porgy, rockfish, largescale blackfish, and sea bass. For lure fishing, grub worms, metal jigs, minnow plugs, and jig heads are used. For float fishing, pole fishing, surfcasting, and snagging, common bait includes ragworms, krill, lugworms, mysid shrimp, fish meat, and squid meat. In autumn, black porgy is abundant with stable catches, while in spring, rockfish fishing is popular, and in summer, largescale blackfish fishing is favored. The main fishing spots are rocky shores, exposed rocks, or isolated rocks, and access requires a fishing boat.",  "forecast": "The Tongyeong area, including Yeonhwa and Udo Islands, has a generally mild and rainy climate, with an annual temperature range of 23℃, meaning the difference between summer and winter is not extreme. Localized heavy rains often occur in summer.",  "ebbf": "In the southern seas of Yeonhwa Island, the flood and ebb currents are 1.7kn and 1.3kn respectively, and near Yeonhwa Strait, they are both 1.4kn. The current between Yeonhwa Island and Udo Island may be stronger, so caution is required.",  "notice": "There is a small exposed rock south of Yeonhwa Island and a power cable connecting Yeonhwa Island and Udo Island. In addition, there are fish farms in the northern seas, so vessels should navigate carefully.",  "wtemp\_sp": "Surface: 16.8℃ Bottom: 13.9℃",  "fish\_sp": "Black porgy, red sea bream, sea bass, rockfish",  "wtemp\_su": "Surface: 23.8℃ Bottom: 15.3℃",  "fish\_su": "Black porgy, red sea bream, rockfish, largescale blackfish, sea bass",  "wtemp\_fa": "Surface: 20.6℃ Bottom: 20.6℃",  "fish\_fa": "Black porgy, red sea bream, rockfish, largescale blackfish, sea bass",  "wtemp\_wi": "Surface: 10.9℃ Bottom: 10.0℃",  "fish\_wi": "Largescale blackfish, rockfish"  },  {  "name": "Baekado & Gulupdo",  "point\_nm": "Baekado Geunmal Pier Rocky Shore",  "dpwt": "2.4m~2.9m",  "material": "Mud",  "tide\_time": "Around spring tide",  "target": "Olive flounder - lure, surfcasting ▶ Greenling - lure, float fishing, pole, surfcasting ▶ Conger eel - surfcasting ▶ Rockfish - float fishing, surfcasting",  "lat": "37.07538889",  "lon": "125.94497220",  "photo": "359.JPEG",  "addr": "Ongjin-gun, Incheon",  "seaside": "y",  "intro": "The main fish species in this area include olive flounder, greenling, sea bass, conger eel, and rockfish. For lure fishing, grub worms, minnow plugs, and jig heads are used. For float fishing, pole fishing, and surfcasting, common bait includes squid meat, horse mackerel, lugworms, ragworms, krill, and red lugworms. The rocky shore fishing at Baekado and Gulupdo is always productive, but access is only possible via hiking trails or fishing boats.",  "forecast": "The area shows characteristics of a continental climate with a relatively large annual temperature range. In winter, strong northwesterly seasonal winds blow, and heavy snow falls. The annual average temperature is about 2~3°C lower compared to the east coast at the same latitude.",  "ebbf": "In the southwest of Baekado, the flood current flows northeastward at 2.3kn from the open sea, while the ebb current flows southwestward at 2.5kn. Between Gulupdo and Uldo, the flood current generally flows northeast and the ebb current flows southwest, with variations depending on terrain. Currents stop at high and low tide, and the maximum flow exceeds 2kn.",  "notice": "About 2 km east of Baekado are many rocky islets such as Beoldo, Gyedo, Gwando, and Gwangdaedo, with water depths between 18–64m and irregular currents. Ships should avoid passing through.",  "wtemp\_sp": "Surface: 9.3°C Bottom: 8.6°C",  "fish\_sp": "\*Baekado: Olive flounder, greenling, conger eel, rockfish \*Gulupdo: Olive flounder, greenling, conger eel, rockfish",  "wtemp\_su": "Surface: 23.5°C Bottom: 21.6°C",  "fish\_su": "\*Baekado: Olive flounder, greenling, sea bass, conger eel, rockfish \*Gulupdo: Olive flounder, greenling, sea bass, conger eel, rockfish",  "wtemp\_fa": "Surface: 14.1°C Bottom: 14.1°C",  "fish\_fa": "\*Baekado: Olive flounder, greenling, sea bass, conger eel, rockfish \*Gulupdo: Olive flounder, greenling, sea bass, conger eel, rockfish",  "wtemp\_wi": "Surface: 3.2°C Bottom: 3.2°C",  "fish\_wi": "\*Baekado: Greenling \*Gulupdo: Greenling"  }  } |