UOF - Stage structure in Formula 1

Formula 1 is one of the sports offered by Sportradar with Sport ID = 40 and it is retrievable among all the sports offered by Sportradar in the "All available sports" UOF API end point (see screenshot below).


```
<sport id="sr:sport:160" name="ESport SSBM"/>
<sport id="sr:sport:112" name="StarCraft"/>
<sport id="sr:sport:127" name="Street Fighter V"/>
<sport id="sr:sport:174" name="Esport Teamfight Tactics"/>
<sport id="sr:sport:156" name="ESport Tekken"/>
<sport id="sr:sport:159" name="ESport TF2"/>
<sport id="sr:sport:120" name="Vainglory"/>
<sport id="sr:sport:194" name="Esport Valorant"/>
<sport id="sr:sport:122" name="WarCraft III"/>
<sport id="sr:sport:115" name="World of Tanks"/>
<sport id="sr:sport:152" name="ESport World of Warcraft"/>
<sport id="sr:sport:77" name="Fencing"/>
<sport id="sr:sport:24" name="Field hockey"/>
<sport id="sr:sport:102" name="Figure Skating"/>
<sport id="sr:sport:53" name="Finnish Baseball"/>
<sport id="sr:sport:172" name="Fishing"/>
<sport id="sr:sport:7" name="Floorball"/>
<sport id="sr:sport:16" name="American Football"/>
<sport id="sr:sport:40" name="Formula 1"/>
<sport id="sr:sport:189" name="Formula 2"/>
<sport id="sr:sport:142" name="Formula E"/>
<sport id="sr:sport:103" name="Freestyle Skiing"/>
<sport id="sr:sport:29" name="Futsal"/>
<sport id="sr:sport:135" name="Gaelic Football"/>
<sport id="sr:sport:136" name="Gaelic Hurling"/>
<sport id="sr:sport:27" name="Gaelic sports"/>
```
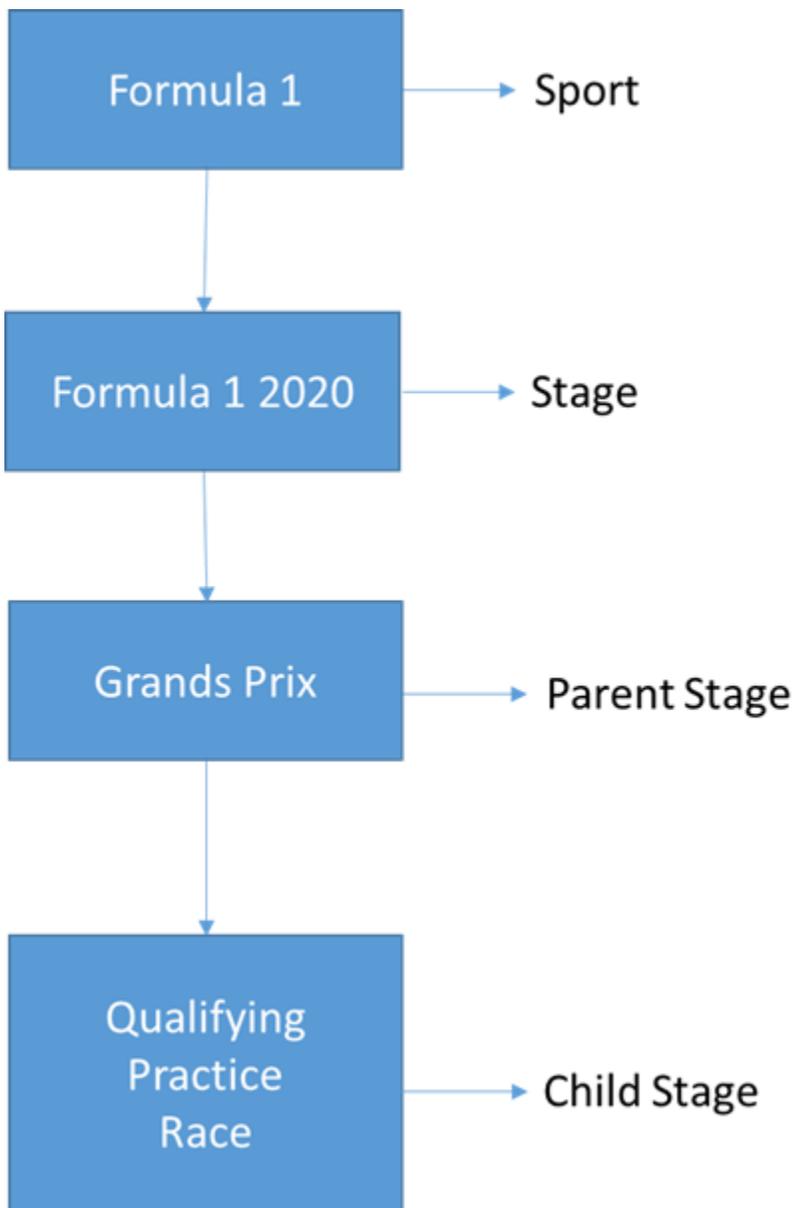
The events related to Formula 1 are organized into stages as shown in the following schema.

The tournament "Formula 1 2020" for example is a stage.

All the Grands Prix events which are related to Formula 1 2020 are parent stages.

Events such as qualifying, practice and race are "child" stages of the previous ones.

The schema is represented in the following picture:

Formula 1 → Sport

Formula 1 2020 → Stage

Grands Prix → Parent Stage

Qualifying Practice Race → Child Stage

How to retrieve Formula 1 stage information by means of the UOF API End Points

Information related to stages (normal stages, parent and child) can be easily retrieved thanks to the UOF API End points.

Starting from the highest level, it is possible to query the end points and get down to lower levels such as practice, qualifying and race events which are child stages.

Here is an example keeping into consideration again Formula 1 2020.

Step 1.

Insert sport id (40 in this case) into the tournament end point in order to find all the tournaments available related to such a sport.

The answer provides the list of the tournaments which are, in this case, Formula 1 2019 and Formula 1 2020. The 2 tournaments are shown in the tournament element and identified as stages.

The id which identifies Formula 1 2020 is a stage ID, in this case 547803 (see the part underlined in red).

```xml
<?xml version="1.0" encoding="UTF-8"?>
<sport_tournaments xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" generated_at="2020-06-16T10:54:27+00:00"
xmlns="http://schemas.sportradar.com/sportsapi/v1/unified" xsi:schemaLocation="http://schemas.sportradar.com/sportsapi/v1/unified
http://schemas.sportradar.com/bsa/unified/v1/xml/endpoints/unified/sport_tournaments.xsd">
<sport id="sr:sport:40" name="Formula 1"/>
<tournaments>
    <tournament id="sr:stage:426678" scheduled="2019-03-15T01:00:00+00:00" scheduled_end="2019-12-01T18:10:00+00:00" name="Formula 1
2019">
        <sport id="sr:sport:40" name="Formula 1"/>
        <category id="sr:category:36" name="Formula 1"/>
    </tournament>
    <tournament id="sr:stage:547803" scheduled="2020-03-13T01:00:00+00:00" scheduled_end="2020-11-29T15:10:00+00:00" name="Formula 1
2020">
        <sport id="sr:sport:40" name="Formula 1"/>
        <category id="sr:category:36" name="Formula 1"/>
    </tournament>
</tournaments>
</sport_tournaments>
```

Step 2.

Insert stage 547803 into the schedule end point.

The schedule end point provides as an answer the list of the Grands Prix which are in Formula 1 2020.

Each Grands Prix is inserted in a sport_event element and identified by a stage ID.

The attribute "type" defines if the stage is parent or child.

```xml
    <sport_event id="sr:stage:549899" scheduled="2020-05-21T09:00:00+00:00" scheduled_end="2020-05-24T15:10:00+00:00" name="Grand Prix
de Monaco 2020" type="parent"/>
    <sport_event id="sr:stage:550117" scheduled="2020-06-05T09:00:00+00:00" scheduled_end="2020-06-07T14:10:00+00:00" name="Azerbaijan
Grand Prix 2020" type="parent"/>
    <sport_event id="sr:stage:550335" scheduled="2020-06-12T15:00:00+00:00" scheduled_end="2020-06-14T20:10:00+00:00" name="Grand Prix
du Canada 2020" type="parent"/>
    <sport_event id="sr:stage:550553" scheduled="2020-06-26T09:00:00+00:00" scheduled_end="2020-06-28T15:10:00+00:00" name="Grand Prix
de France 2020" type="parent"/>
    <sport_event id="sr:stage:550771" scheduled="2020-07-03T09:00:00+00:00" scheduled_end="2020-07-05T15:10:00+00:00" name="Grosser
Preis von Osterreich 2020" type="parent"/>
    <sport_event id="sr:stage:600013" scheduled="2020-07-10T09:00:00+00:00" scheduled_end="2020-07-12T15:10:00+00:00" name="Grosser
Preis der Steiermark 2020" type="parent"/>
    <sport_event id="sr:stage:551207" scheduled="2020-07-17T09:00:00+00:00" scheduled_end="2020-07-19T15:10:00+00:00" name="Magyar
Nagydij 2020" type="parent"/>
    <sport_event id="sr:stage:550989" scheduled="2020-07-31T09:00:00+00:00" scheduled_end="2020-08-02T15:10:00+00:00" name="British
Grand Prix 2020" type="parent"/>
    <sport_event id="sr:stage:600231" scheduled="2020-08-07T10:00:00+00:00" scheduled_end="2020-08-09T15:10:00+00:00" name="70th
Anniversary Grand Prix 2020" type="parent"/>
    <sport_event id="sr:stage:549681" scheduled="2020-08-14T09:00:00+00:00" scheduled_end="2020-08-16T15:10:00+00:00" name="Gran Premio
de Espana 2020" type="parent"/>
    <sport_event id="sr:stage:551425" scheduled="2020-08-28T09:00:00+00:00" scheduled_end="2020-08-30T15:10:00+00:00" name="Belgian
Grand Prix 2020" type="parent"/>
    <sport_event id="sr:stage:551643" scheduled="2020-09-04T09:00:00+00:00" scheduled_end="2020-09-06T15:10:00+00:00" name="Gran Premio
DItalia 2020" type="parent"/>
    <sport_event id="sr:stage:551861" scheduled="2020-09-18T08:30:00+00:00" scheduled_end="2020-09-20T14:10:00+00:00" name="Singapore
Grand Prix 2020" type="parent"/>
```

Step 3.

Insert stage 550771 into the summary end point.

The summary end point provides detailed info related to the event.

Inserting the parent stage into the filter for the end point, it is possible to retrieve all the child events.

The element "races" provides a list of sport_event elements which are identified with a stage ID and which are described by the stage_type.

The stage_type shows if the event is a practise, a qualifying or a race event.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<race_summary xmlns="http://schemas.sportradar.com/sportsapi/v1/unified" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
generated_at="2020-06-16T11:03:49+00:00" xsi:schemaLocation="http://schemas.sportradar.com/sportsapi/v1/unified
http://schemas.sportradar.com/bsa/unified/v1/xml/endpoints/unified/race_summary.xsd">
    <sport_event id="sr:stage:550771" name="Grosser Preis von Osterreich 2020" type="parent" scheduled="2020-07-03T09:00:00+00:00"
scheduled_end="2020-07-05T15:10:00+00:00" stage_type="event">
        <parent id="sr:stage:547803" name="Formula 1 2020" type="parent" stage_type="season"/>
        <tournament id="sr:stage:547803" name="Formula 1 2020" scheduled="2020-03-13T01:00:00+00:00" scheduled_end="2020-11-
29T15:10:00+00:00">
            <sport id="sr:sport:40" name="Formula 1"/>
            <category id="sr:category:36" name="Formula 1"/>
        </tournament>
        <races>
            <sport_event id="sr:stage:550773" type="child" scheduled="2020-07-03T09:00:00+00:00" stage_type="practice"/>
            <sport_event id="sr:stage:550775" type="child" scheduled="2020-07-03T13:00:00+00:00" stage_type="practice"/>
            <sport_event id="sr:stage:550777" type="child" scheduled="2020-07-04T10:00:00+00:00" stage_type="practice"/>
            <sport_event id="sr:stage:550779" type="child" scheduled="2020-07-04T13:00:00+00:00" stage_type="qualifying"/>
            <sport_event id="sr:stage:550787" type="child" scheduled="2020-07-05T13:10:00+00:00" stage_type="race"/>
        </races>
    </sport_event>
    <sport_event_status status="not_started">
        <results/>
    </sport_event_status>
</race_summary>
```

Step 4.

Insert stage 550787 into the summary end point or into the fixture end point.

Once the stage ID of the race has been retrieved, then it is possible to gather more information in regards (scheduling, ending time, parent stage, tournament etc.)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<race_summary xmlns="http://schemas.sportradar.com/sportsapi/v1/unified" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
generated_at="2020-06-16T11:06:15+00:00" xsi:schemaLocation="http://schemas.sportradar.com/sportsapi/v1/unified
http://schemas.sportradar.com/bsa/unified/v1/xml/endpoints/unified/race_summary.xsd">
    <sport_event id="sr:stage:550787" name="Race" type="child" scheduled="2020-07-05T13:10:00+00:00" scheduled_end="2020-07-
05T15:10:00+00:00" stage_type="race">
        <parent id="sr:stage:550771" name="Grosser Preis von Osterreich 2020" type="parent" stage_type="event"/>
        <tournament id="sr:stage:547803" name="Formula 1 2020" scheduled="2020-03-13T01:00:00+00:00" scheduled_end="2020-11-
29T15:10:00+00:00">
            <sport id="sr:sport:40" name="Formula 1"/>
            <category id="sr:category:36" name="Formula 1"/>
        </tournament>
    </sport_event>
    <sport_event_status status="not_started">
        <results/>
    </sport_event_status>
</race_summary>
```