SmartPark Study Guide

Welcome to your colorful, study-friendly companion! Each section highlights a file from the SmartPark project, shows the s

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Server/constants.py

Show code

```python
ROOT_BRANCH = "SondosPark"
STAT_FREE = "FREE"
STAT_WAIT = "WAITING"
STAT_OCC = "OCCUPIED"
```

Line(s)	Explanation
1	Defines the Firebase Realtime Database root branch the backend writes under.
2	Symbol shared by services to tag a spot as free.
3	Symbol for the waiting/reserved state in queues and UI.
4	Symbol for an occupied spot.

Server/data_structures.py

Show code

```python
"""
Full source included for reference while studying.
"""
```

```python
from typing import Dict, Optional, Tuple, Callable
import random
from bisect import bisect_left, insort
from collections import deque

class SortedList:
    """A small sorted list with optional key function. Compatible with previous API.

    If key is provided, items are ordered by key(item). Internally stores
    tuples (k, item) when key is set to allow use of insort.
    """
    def __init__(self, iterable=None, key: Optional[Callable] = None):
        self._key = key
        self._list = []
```