

Lambda House — Mermaid Diagrams

The following Mermaid source summarizes the structure and behavior of `batem/core/lambdahouse.py`.

UML Class Diagram

```
classDiagram
    class ParametricData {
        +signature : int
        +parametric(name=None)
        +select(name)
        +section(name)
        +sections()
        +set(name, *values)
        +deduce(name, fn)
        +result(name, value)
        +__str__()
    }

    class LambdaParametricData {
        +__init__(swd_builder, year, albedo=0.1, pollution=0.1)
        -_initialize_weather_data(...)
        -_initialize_site_parameters(...)
        -_initialize_house_parameters(...)
        -_initialize_hvac_parameters(...)
        -_initialize_pv_parameters(...)
        -_initialize_inhabitant_parameters(...)
        -_initialize_weather_analysis(...)
        -_initialize_solar_system(...)
        -_initialize_occupancy(...)
    }

    class ReportGenerator {
        +__init__(location, year, on_screen=True)
        +add_text(text, on_screen_only=False, on_mmd_only=False)
        +add_image(file_name)
        +add_pretty_table(table, on_screen_only=False, on_mmd_only=False)
        +add_time_plot(...)
        +add_figure(...)
        +close(parameters_description, pdf=True, latex_template=None, features=True)
    }

    class Analyzes {
        +__init__(lpd, on_screen=True)
        +climate()
        +house()
        +solar()
        +thermal()
        +electricity()
        +parametric()
    }
```