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A SIMPLE BENCHMARK: THE FAMILIES TO PERSONS CASE



Why is providing a **benchmark** for **bx** challenging?

“A benchmark should enable direct comparisons of bidirectional transformation (bx) tools based on a maintained set of examples and **executable** test cases.”



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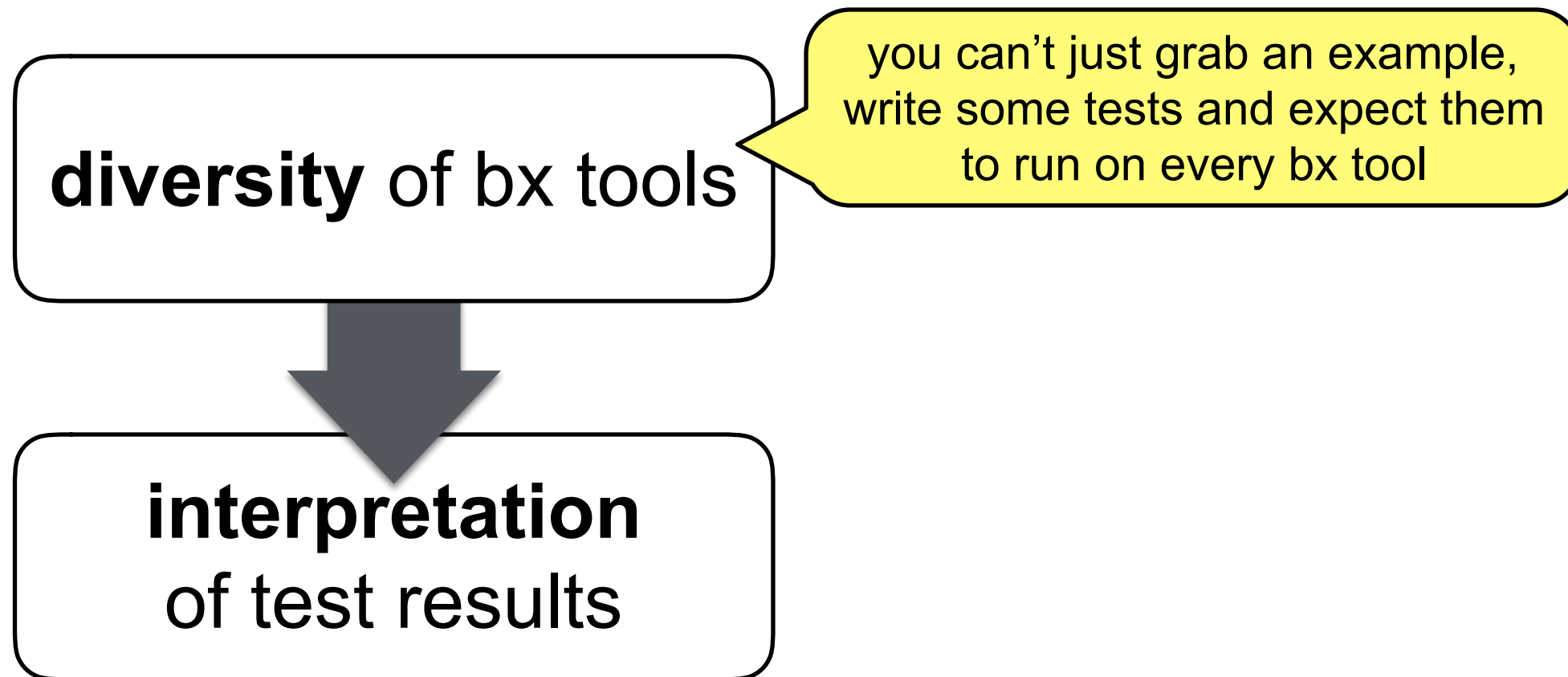
diversity of bx tools

you can't just grab an example,
write some tests and expect them
to run on every bx tool



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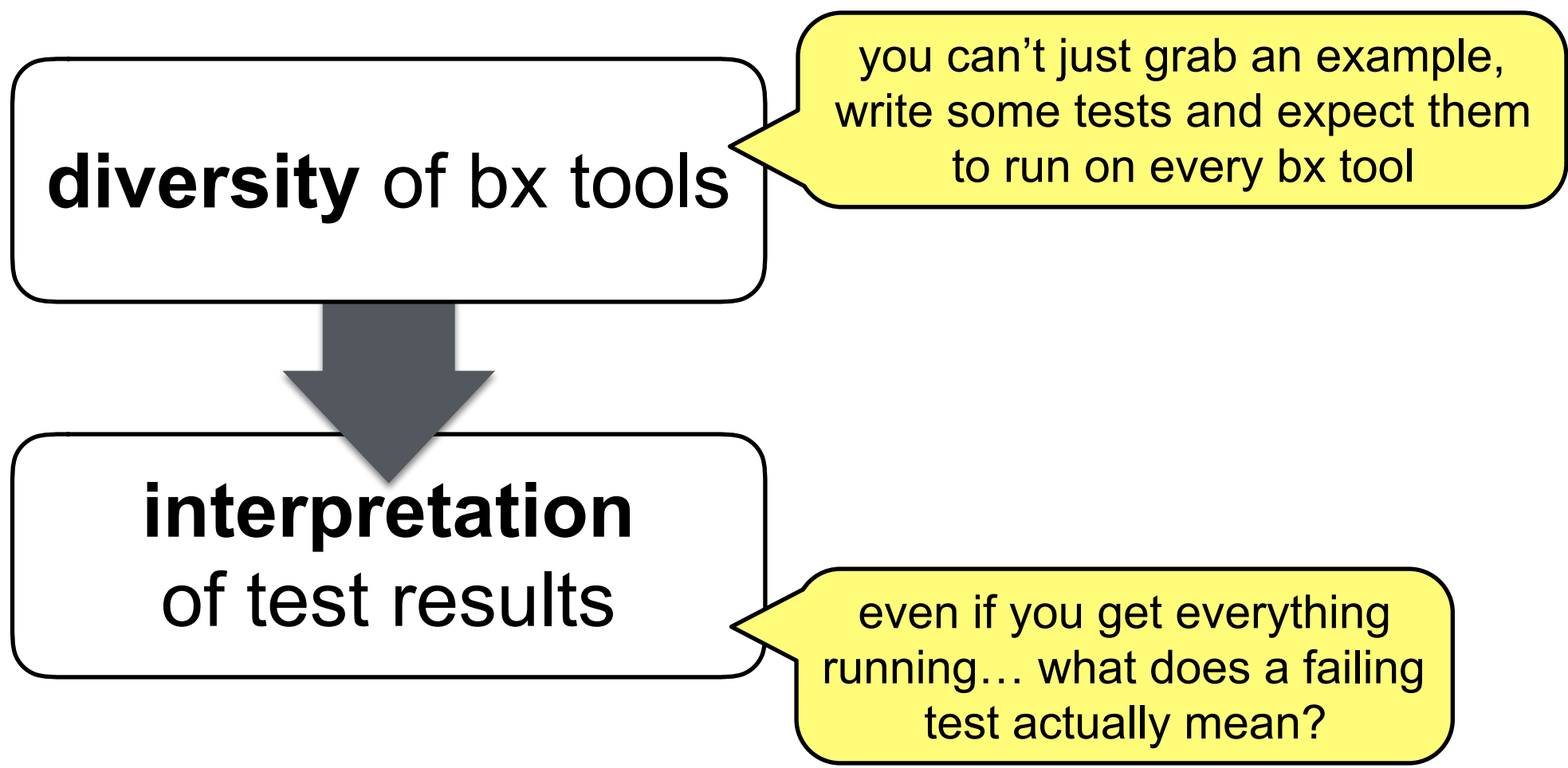
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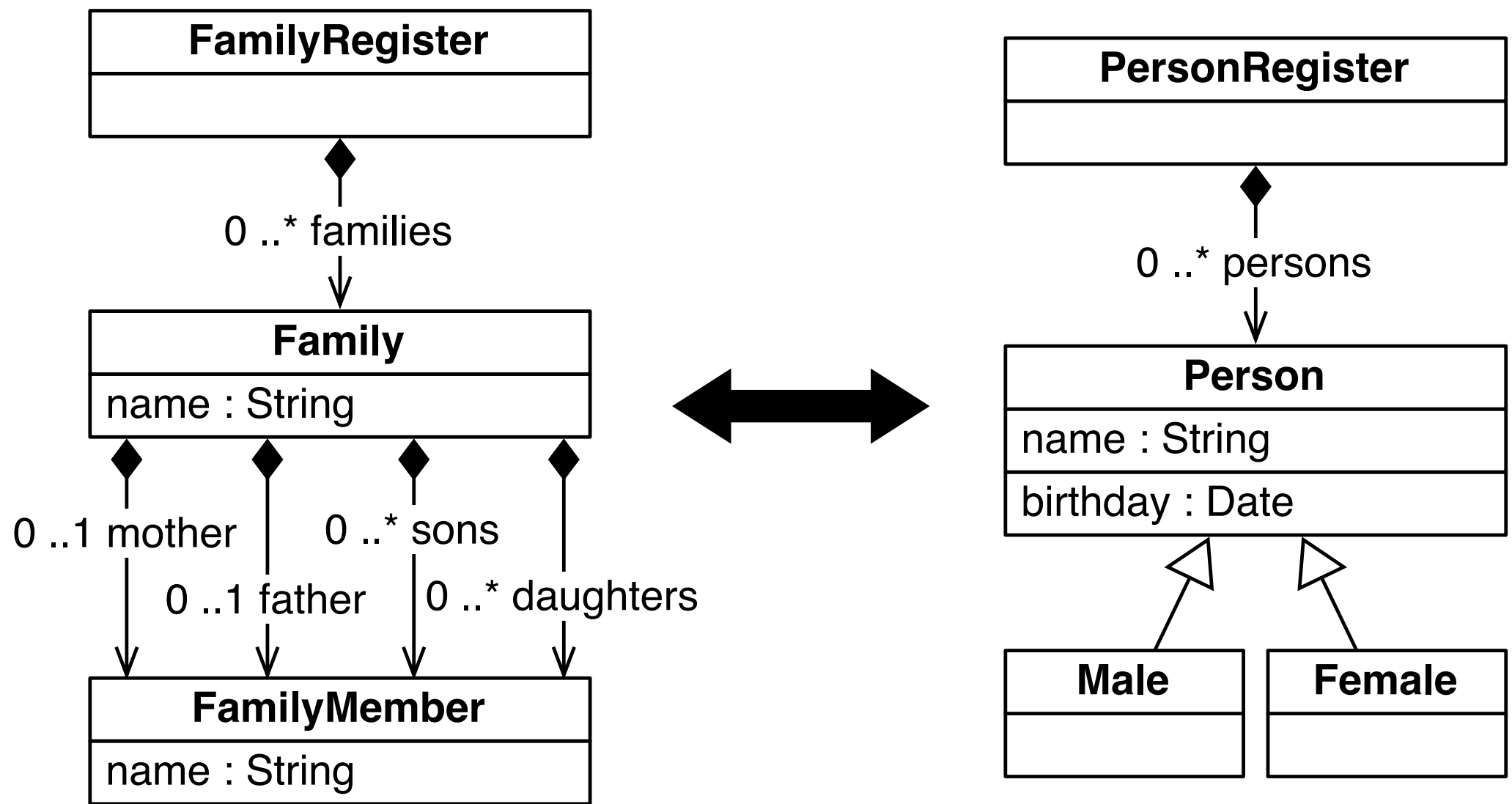
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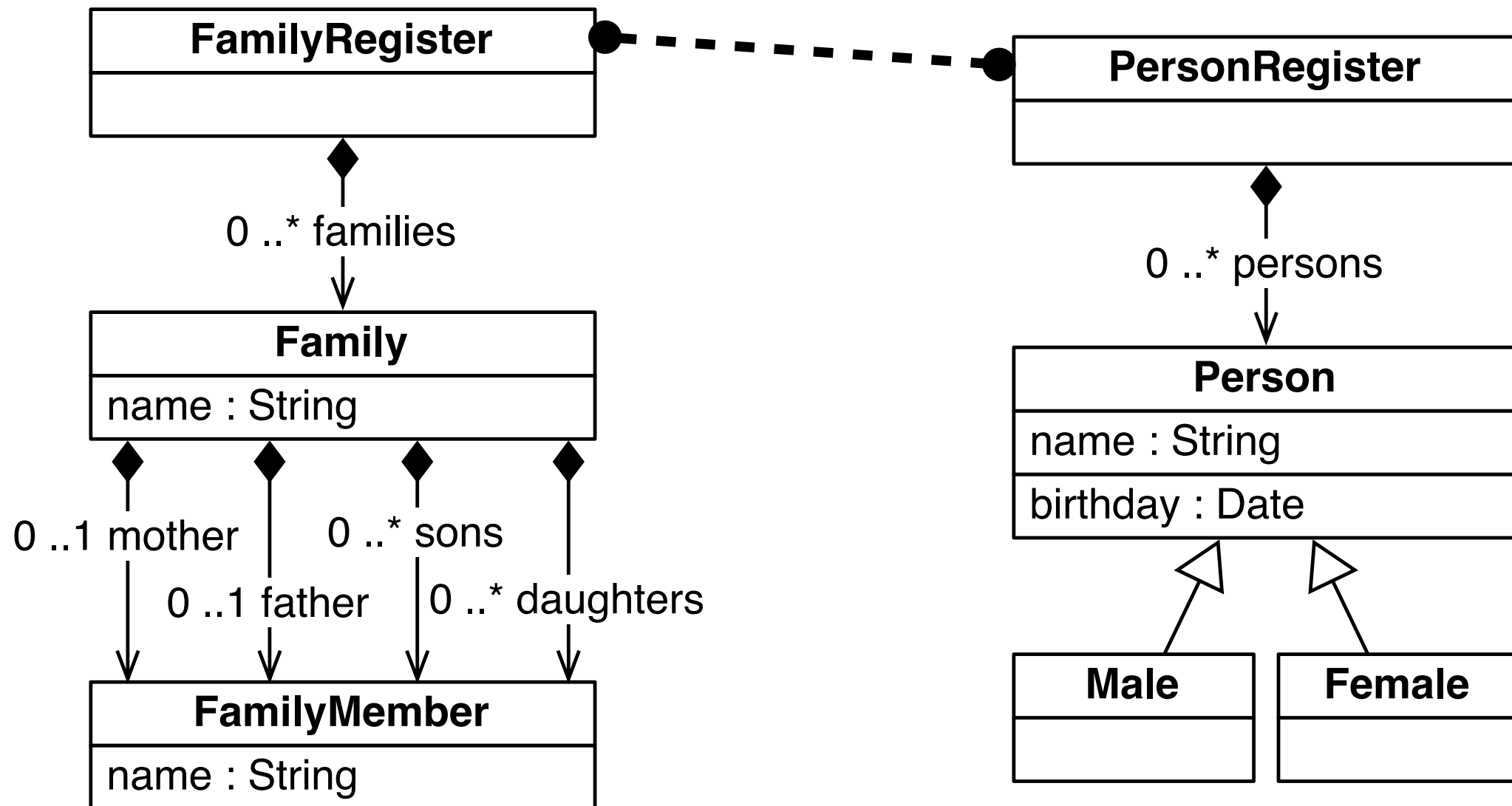


The data structures involved





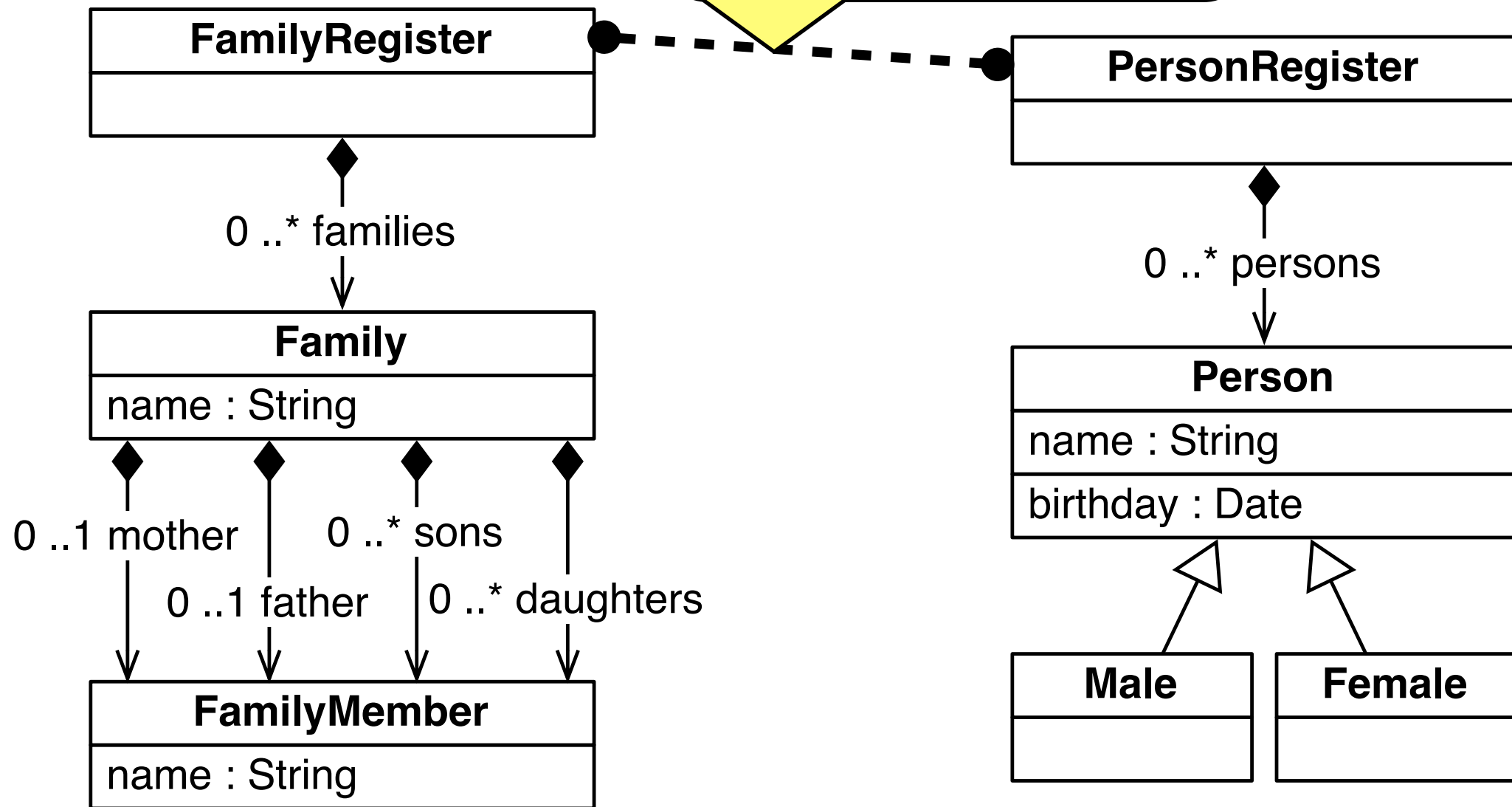
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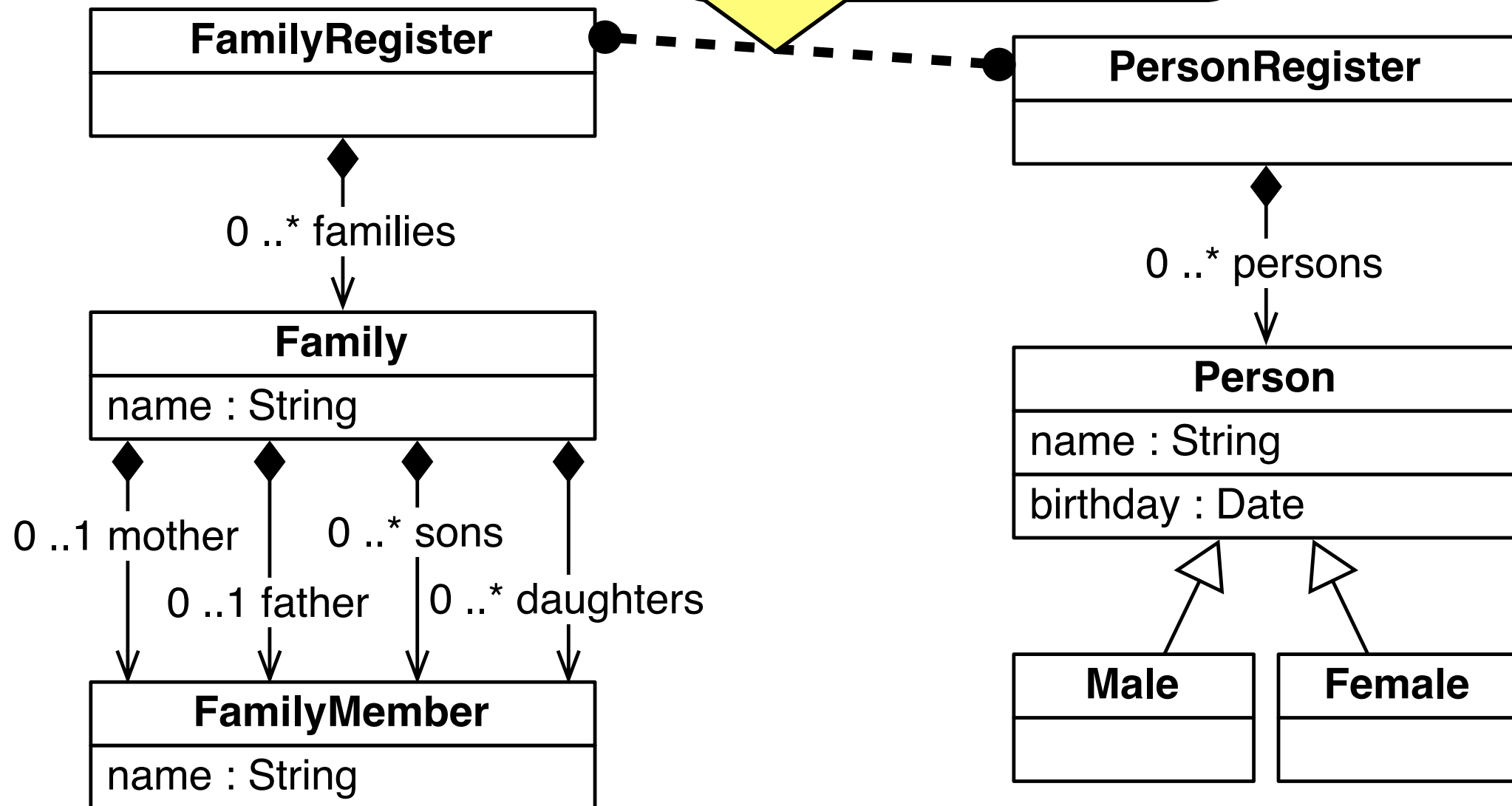
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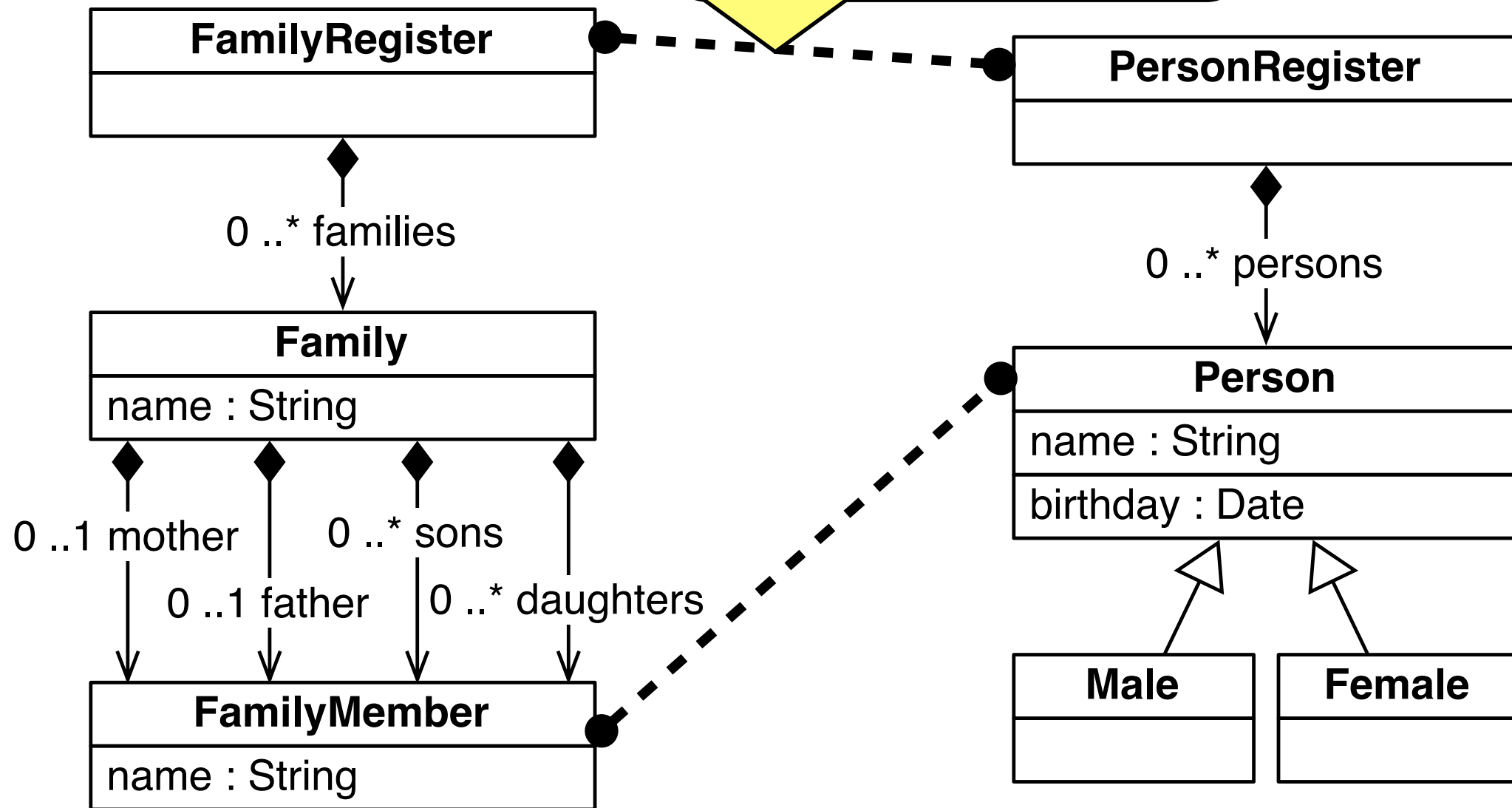


family members must be mapped bijectively to **persons**



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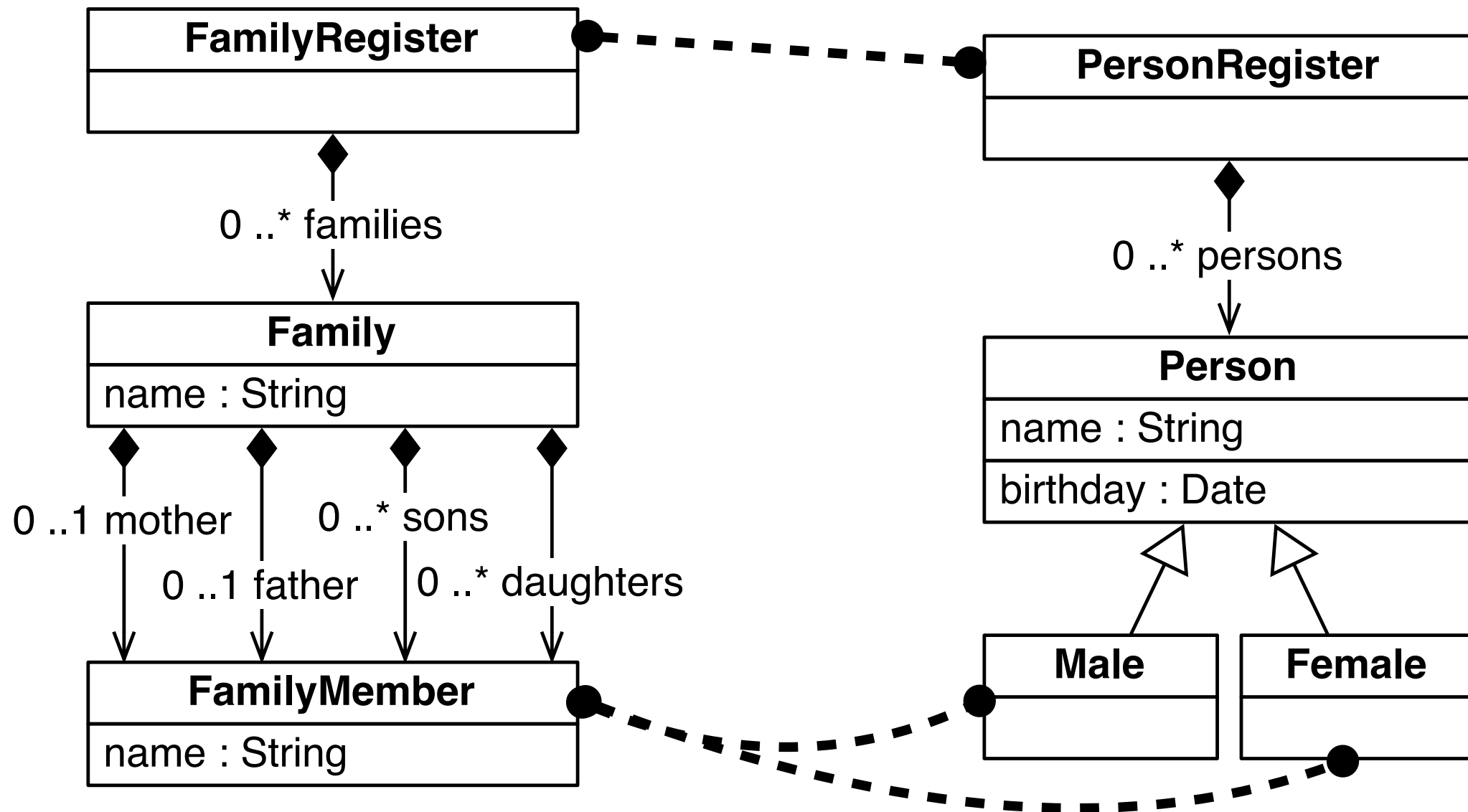
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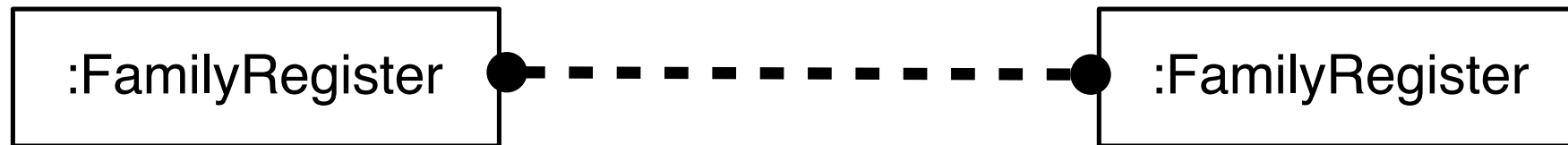
mothers/daughters (fathers/sons) are female (male);
every person **p**'s name is "**f.name, m.name**",
where **m** is the member (in family **f**) paired with **p**



Consistency restoration? Not as simple as you think!

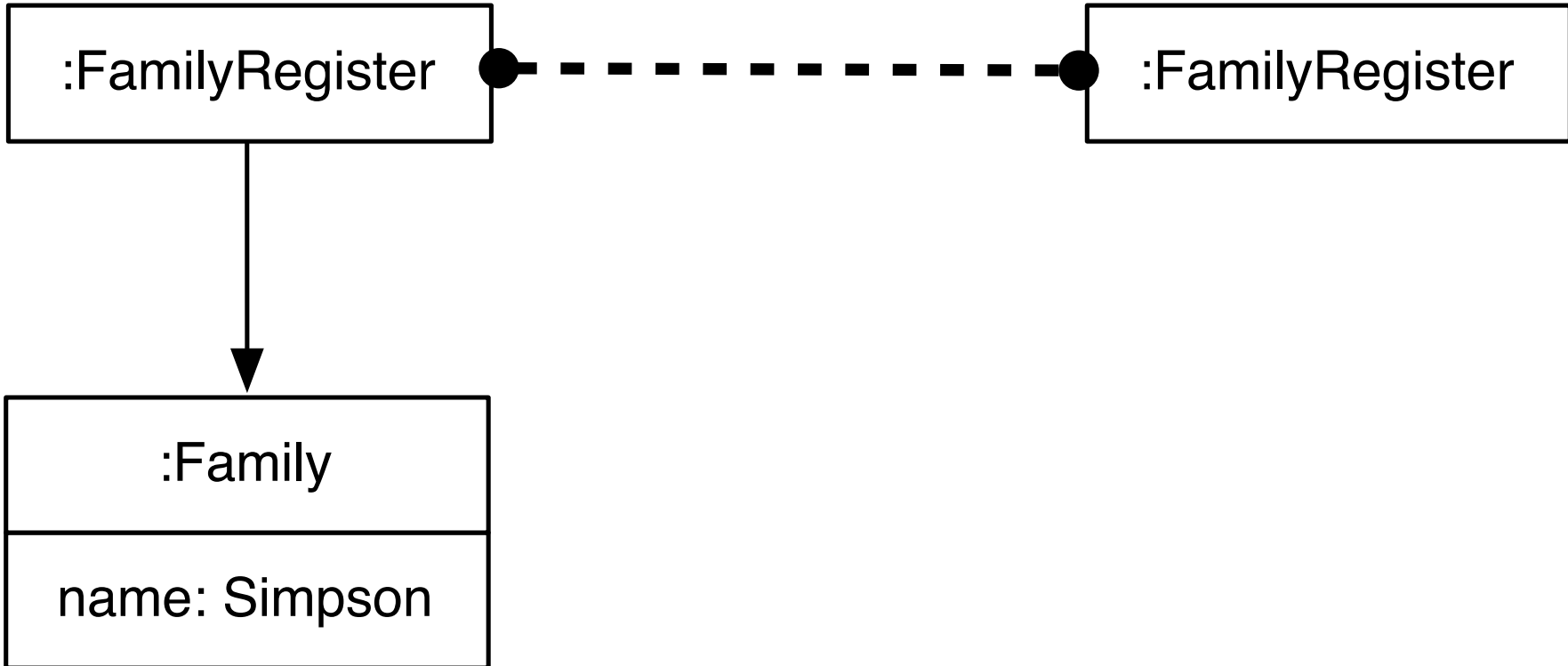


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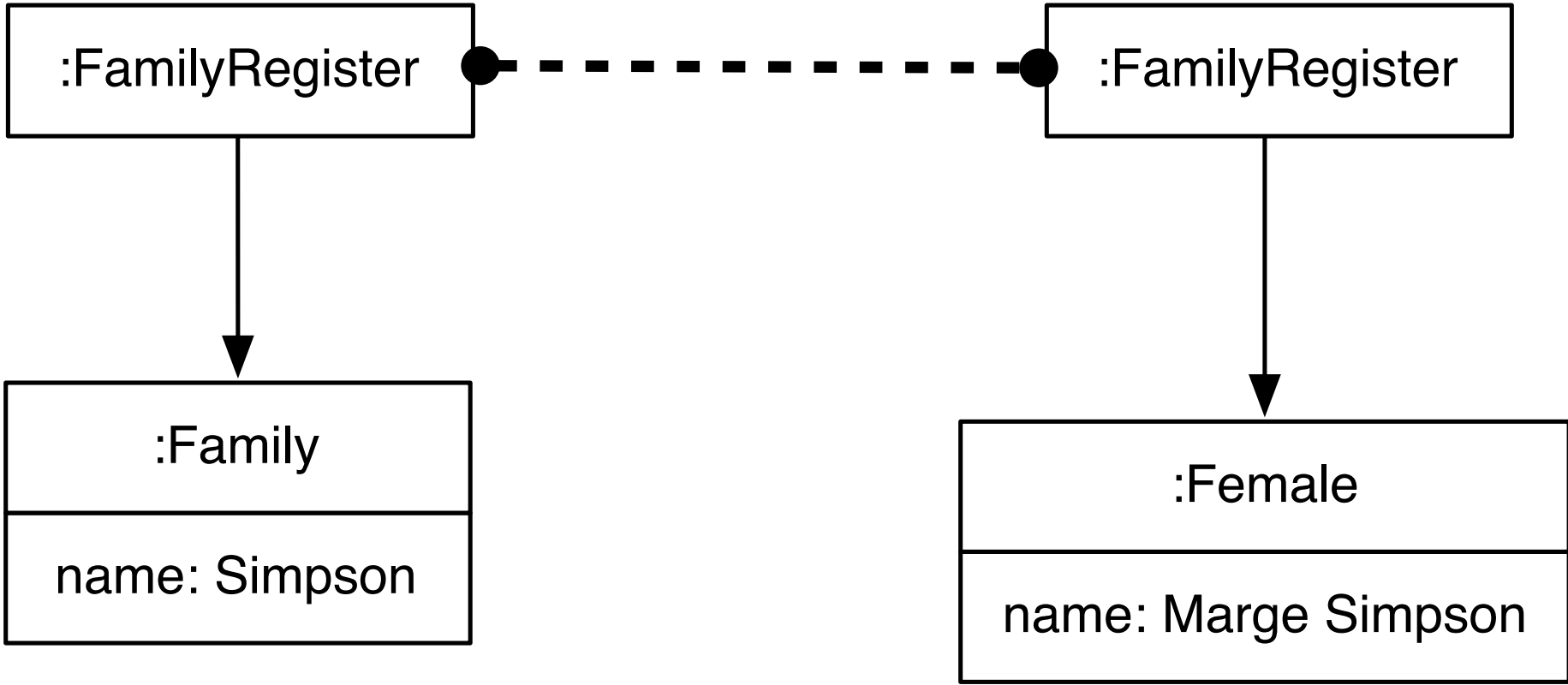


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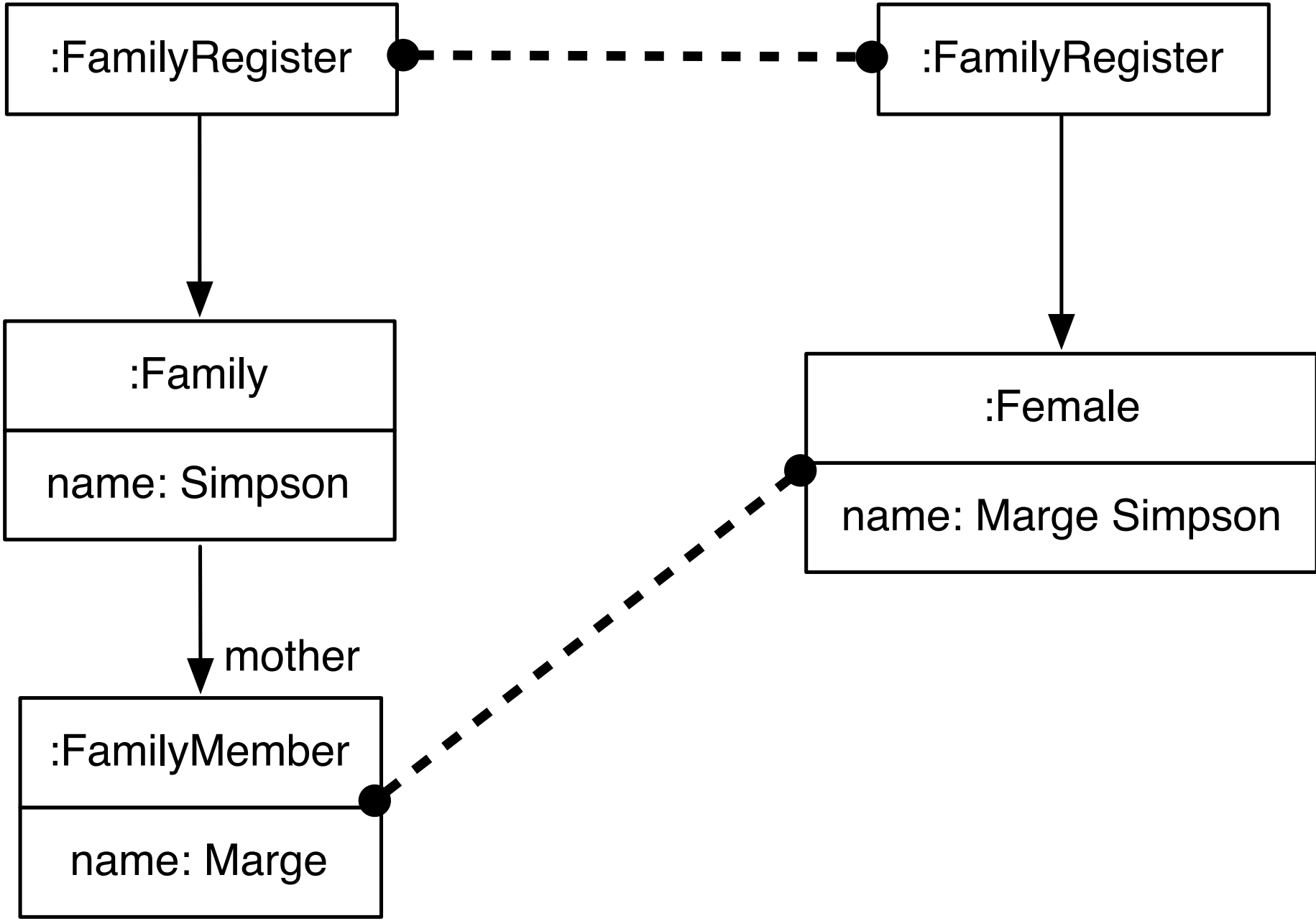


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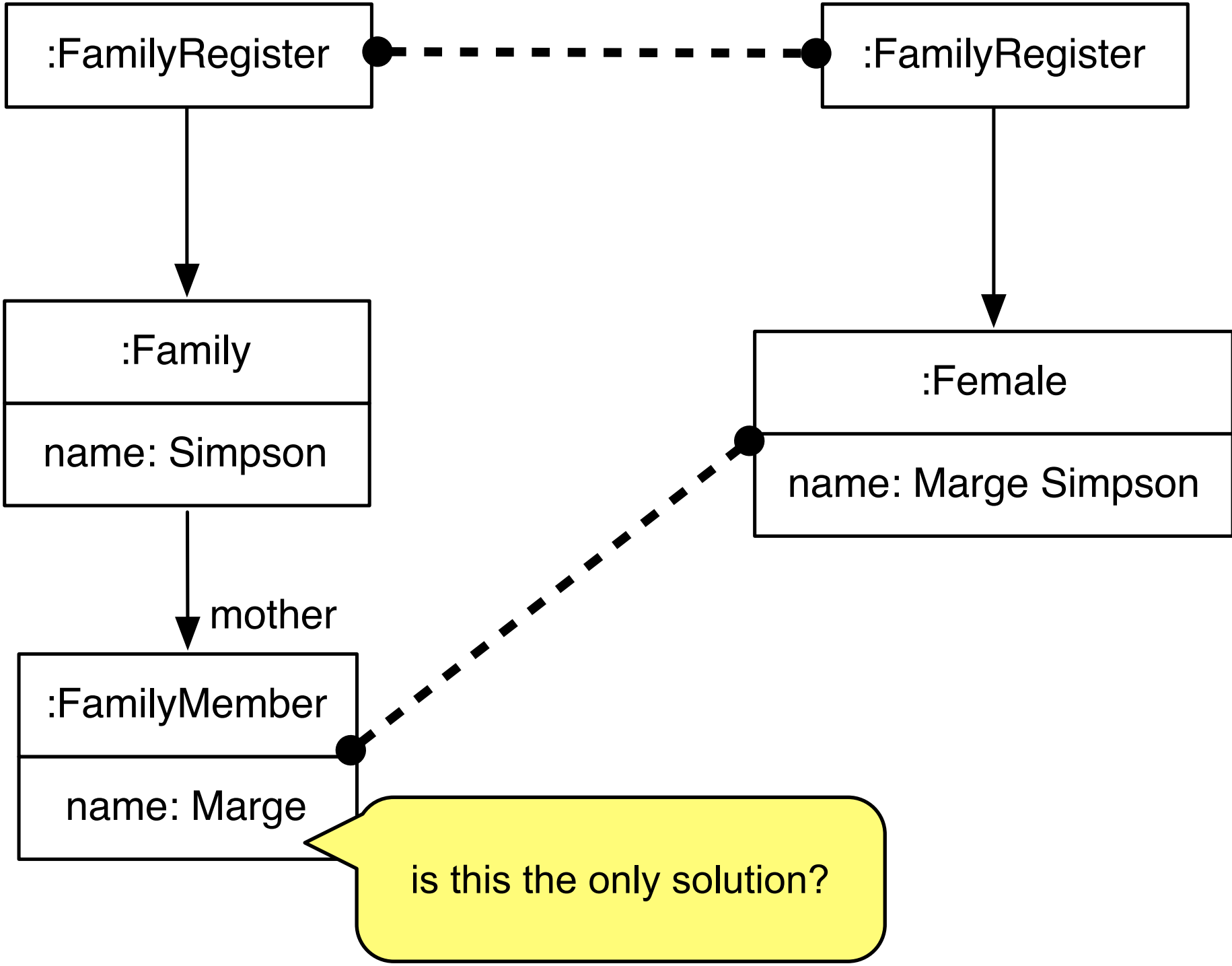


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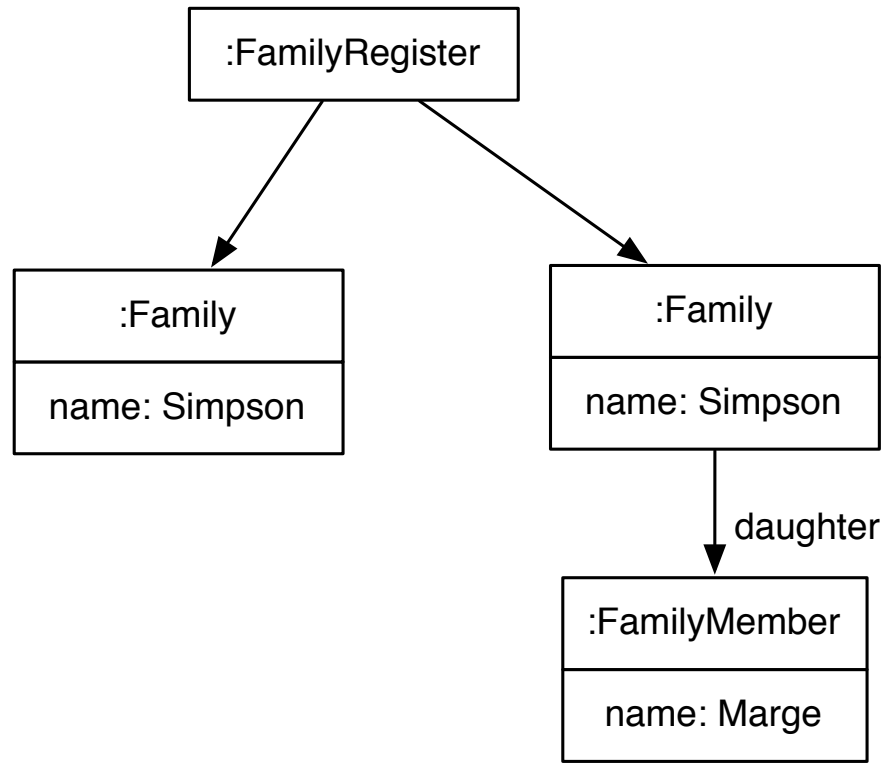
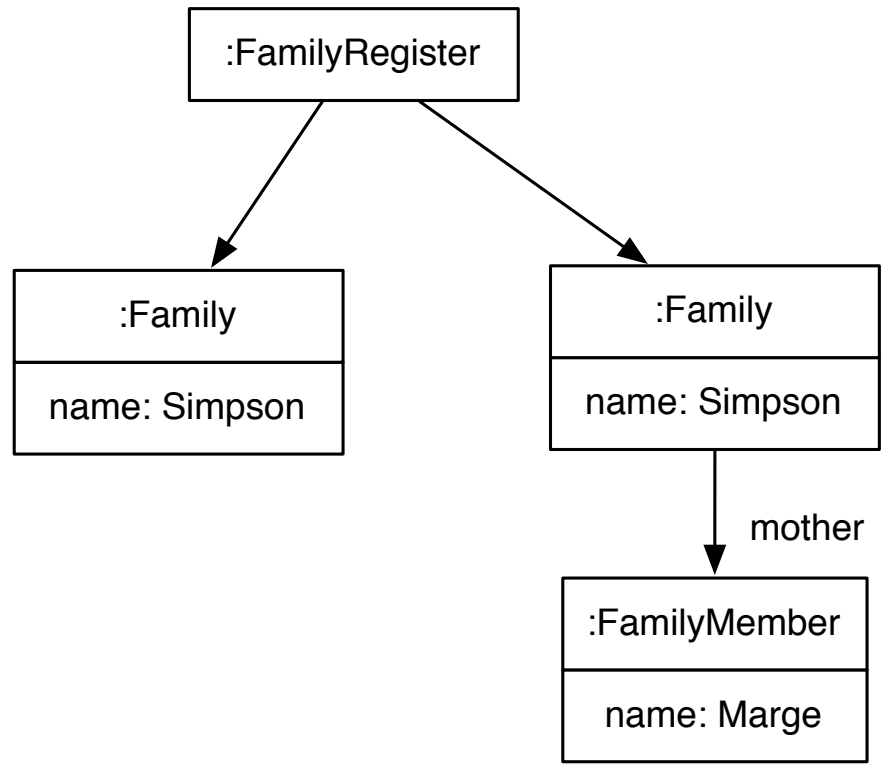
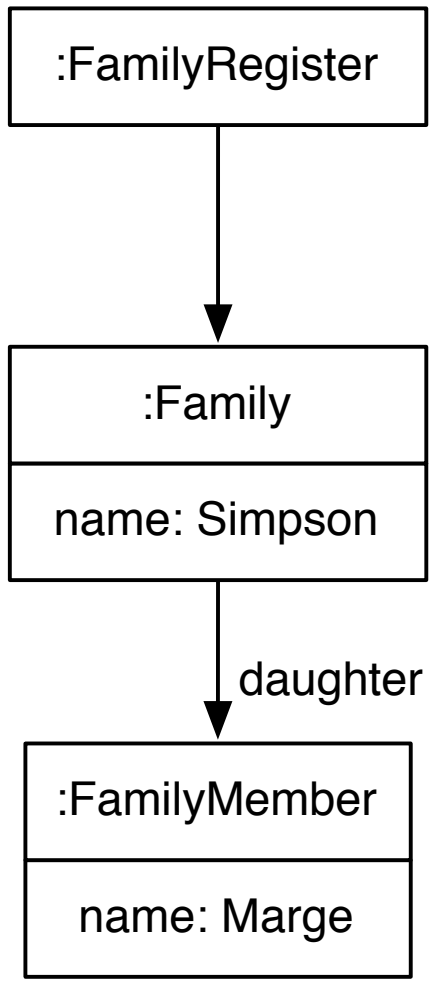
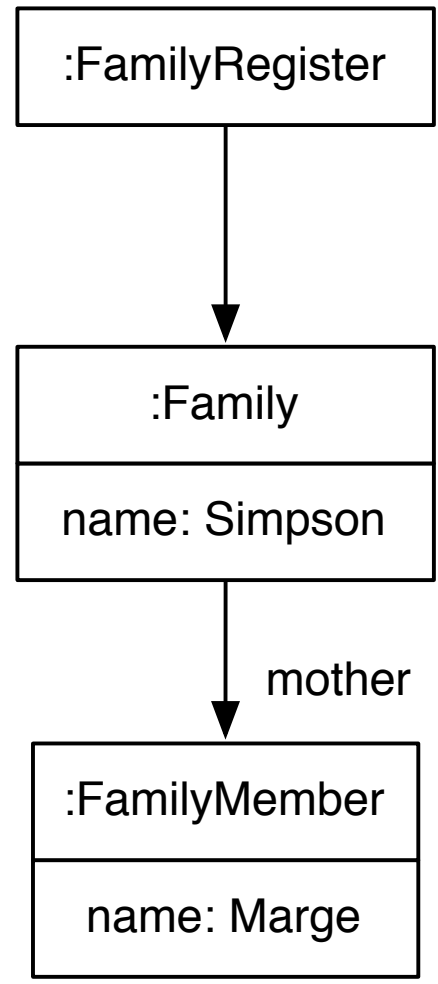


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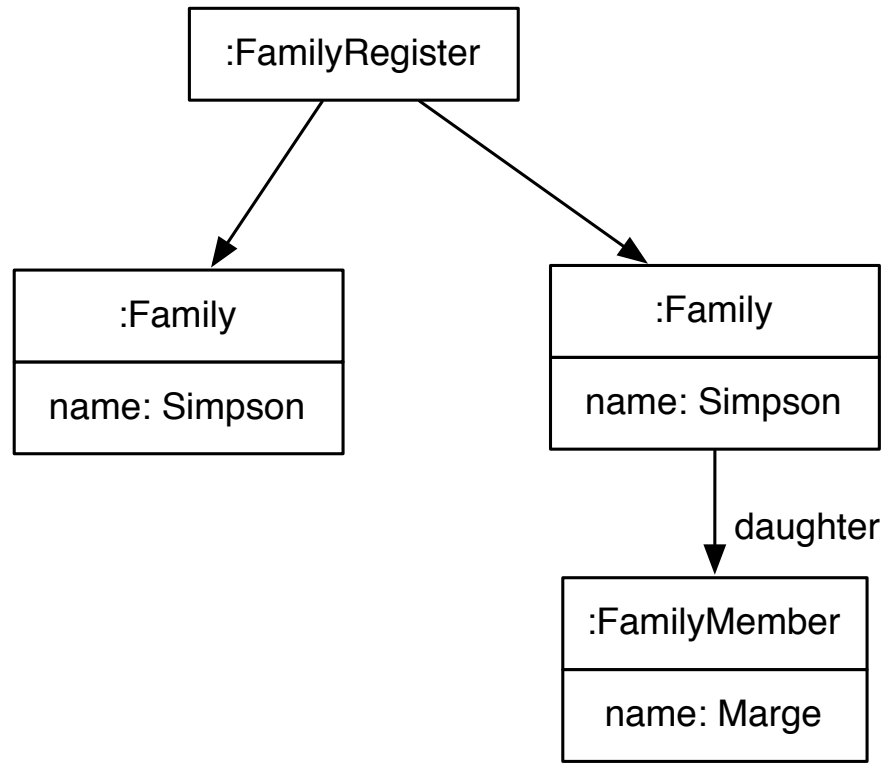
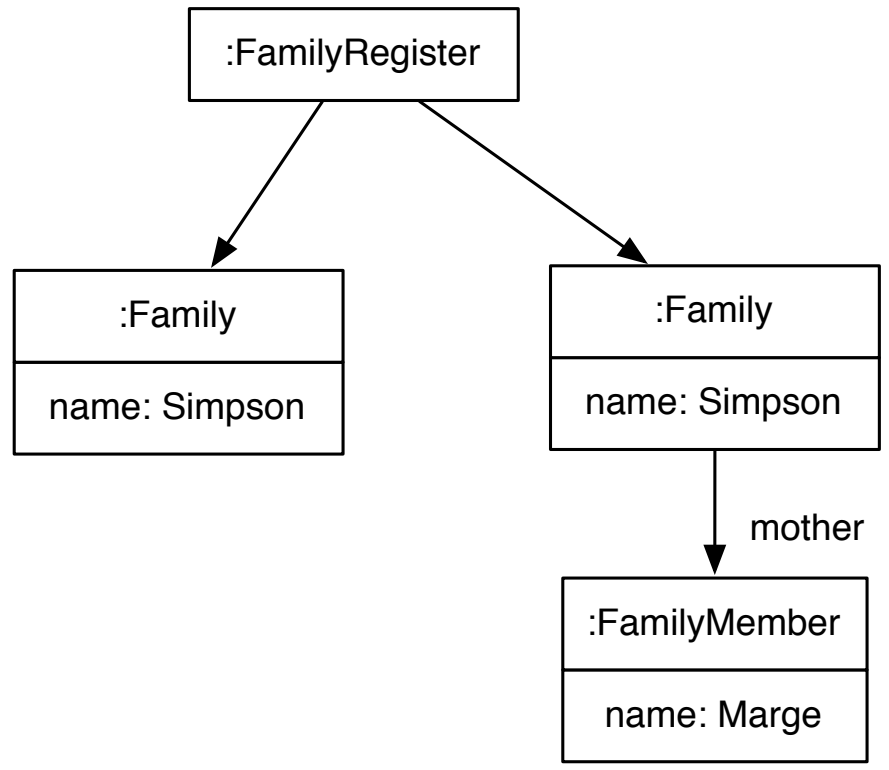
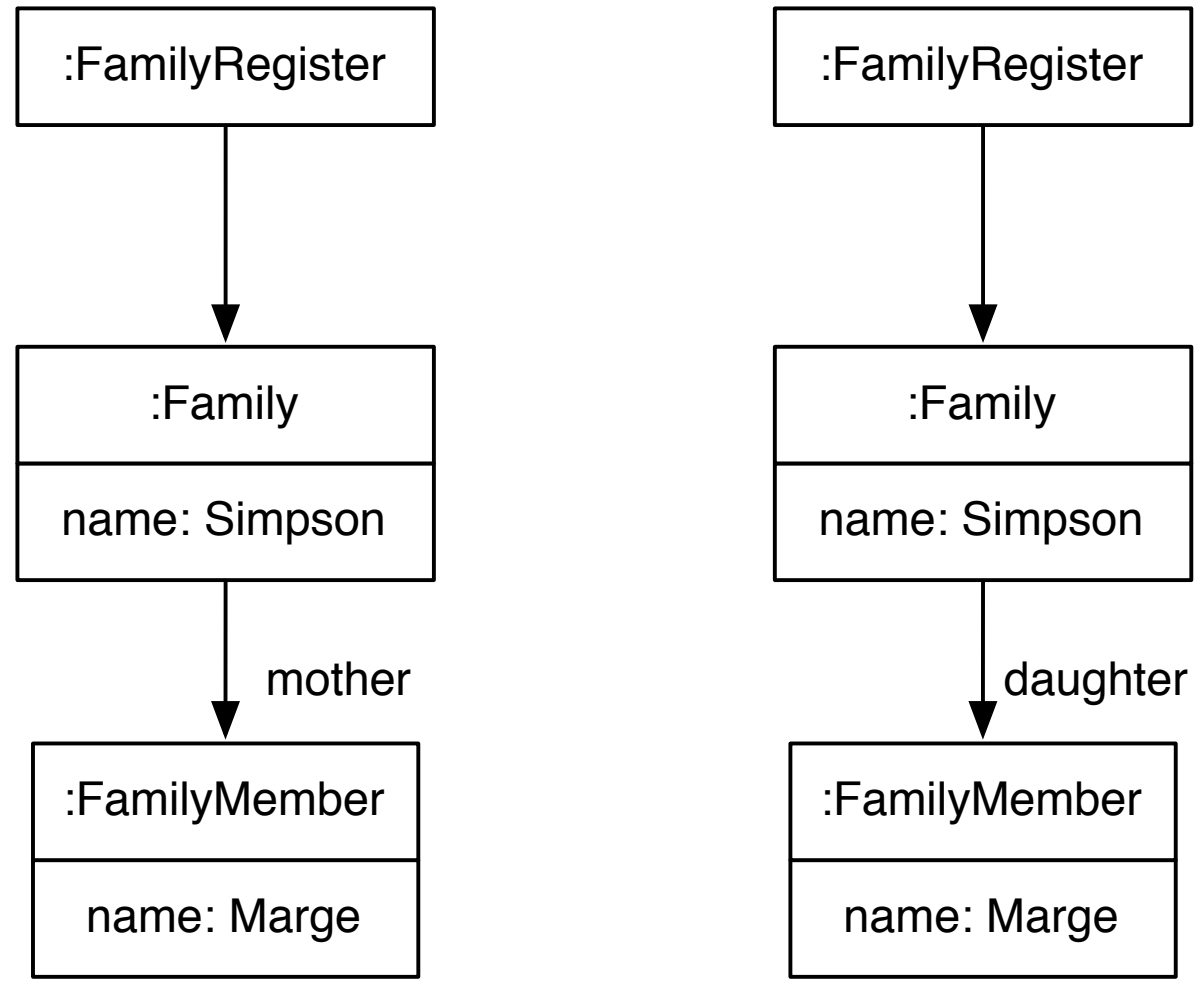


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consistency restoration requires a design-time or runtime **update policy** (just one dimension of complexity)



Take the challenge!

Share

http://is.ieis.tue.nl/staff/pvgorp/share/Ubuntu12LTS_BenchmarkX.vdi



<https://github.com/eMoflon/benchmarkx>



Please **evaluate** the solutions presented

<https://goo.gl/forms/c1ziOhu0gFOSAXwq2>



References

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