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Project: #5 (Time-dependent explanations of neural networks for survival analysis)

Roadmap:

- 1. Run *DeepHit* model on synthetic and real-world medical data.
- 2. Obtain explanations with:
 - a. SurvSHAP(t) a model-agnostic method specifically designed for survival models.
 - b. *DeepLift* a general-purpose method designed to be used with NNs.
- 3. Compare these two methods w.r.t.
 - a. Speed *DeepLift* should be a lot faster, but how much faster?
 - b. Accuracy How good is general-purpose *DeepLift* in explaining survival models compared to a purpose-built *SurvSHAP(t)*?
 - i. For real-world medical data, it may be able to do the analysis qualitatively.
 - ii. We should also use quantitative metrics, such as *Avg-Sensitivity* and *Faithfulness Correlation*, among others.