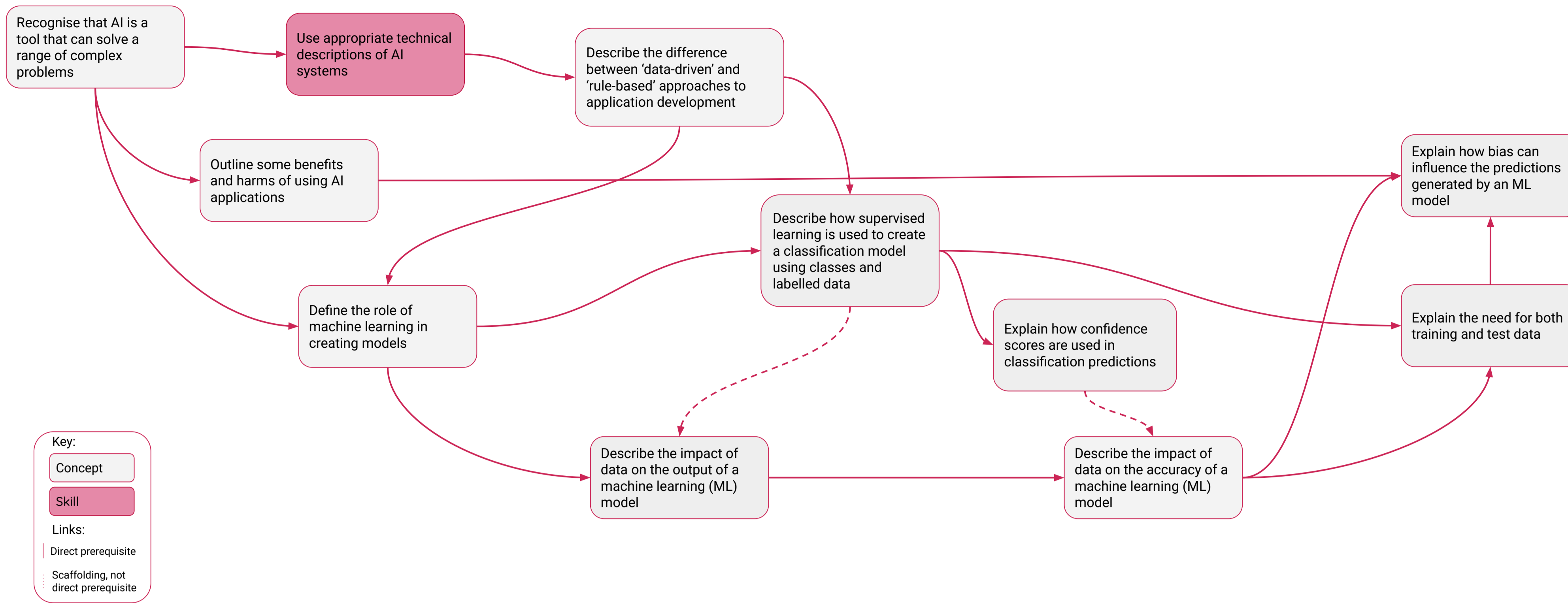
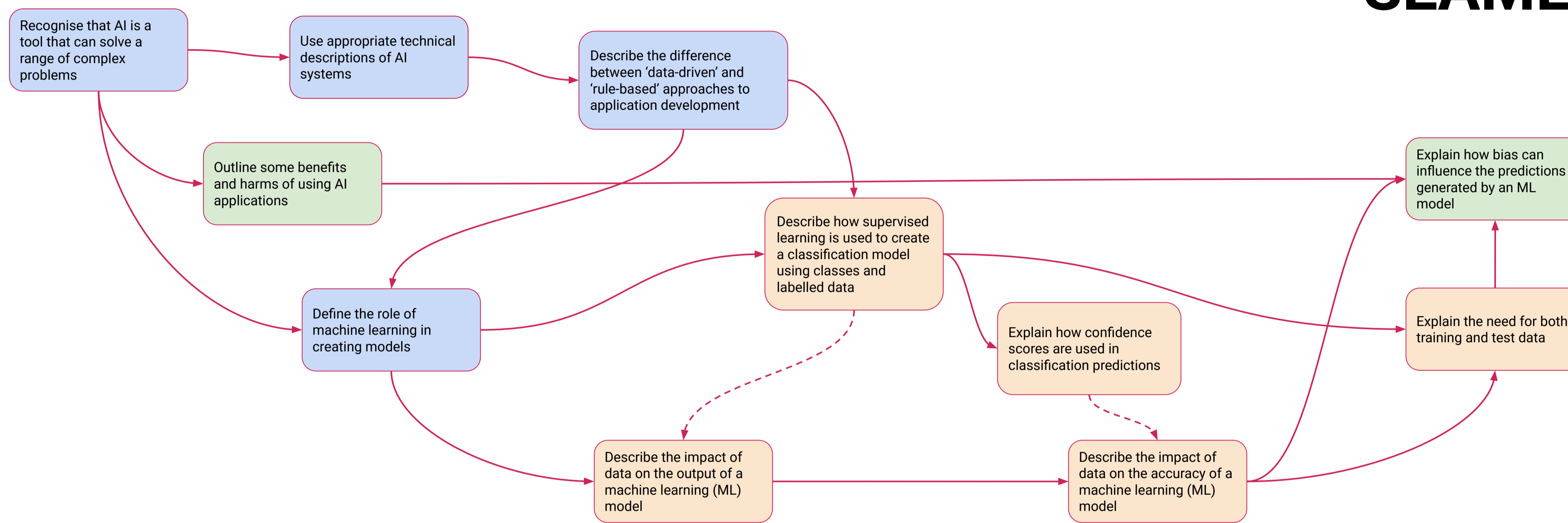


# Concepts and skills



# SEAME framework levels



|                                   |                                                                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Social and ethical considerations | e.g. knows about the idea of bias in machine learning (ML), understands that artificial intelligence (AI) is not magic and machines are not self-deterministic |
| Applications                      | e.g. knows some systems that include AI components, can design an application that includes ML image recognition                                               |
| Models                            | e.g. can explore an ML model that was created by someone else, understands the process for selecting and cleaning data needed to train a simple ML model       |
| Engines                           | e.g. can explain how a decision tree can be used to classify items, can explain in simple terms how a neuron works with relationship to learning about ML      |

The SEAME framework for learning and teaching AI and ML (a revised version of Waite & Curzon, 2018; see also [rpf.io/blog-seame-framework](http://rpf.io/blog-seame-framework))

# Bloom's Taxonomy

