Examples of Important Historical Developments in the field of AI Planning

PDDL: The Planning Domain Definition Language (PDDL) was first developed by Drew McDermott and his colleagues in 1998. PDDL is an action-centred language, inspired by the well-known STRIPS formulations of planning problems.
PDDL help standardized syntax for representing AI planning problems formalizing actions and has been used as the standard language for the Interna- tional Planning Competition since 1998.

Graphplan: Graphplan is an algorithm for automated planning developed by Avrim Blum and Merrick Furst in 1995. Graphplan takes as input a planning problem expressed in STRIPS and produces, if one is possible, a sequence of operations for reaching a goal state. Planning graph can be used to give better heuristic estimates. Using GRAPHPLAN algorithm helps search for a solution over the space formed by the planning graph.

First-order logic: First-order logic is complete (Gödel, 1929), compact and sound, and all its particular formalizations as deductive systems are equivalent (Lindström, 1969). First-order logic uses quantified variables over non-logical objects and allows the use of sentences that contain variables, First-order logic replacing the notion of linear time with a notion of branching *situations*, using a representation called situation calculus.

References

[PDDL Background: https://www.cs.cmu.edu/afs/cs/project/jair/pub/volume20/fox03a-html/node2.html]

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[https://math.stackexchange.com/questions/176263/is-first-order-logic-fol-the-only-fundamental-logic]

[https://en.wikipedia.org/wiki/Graphplan]

[*Artificial Intelligence: A Modern Approach* by Norvig and Russell]

[[Labyrinth of Thought: A History of Set Theory and Its Role in Modern Mathematics]