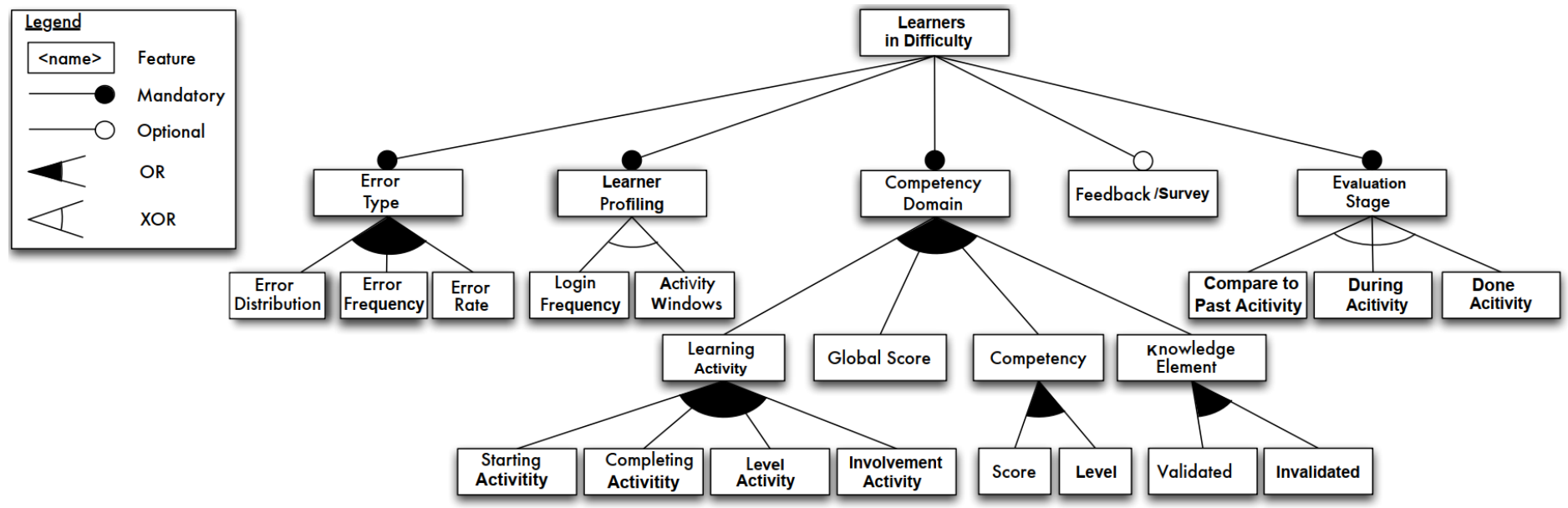
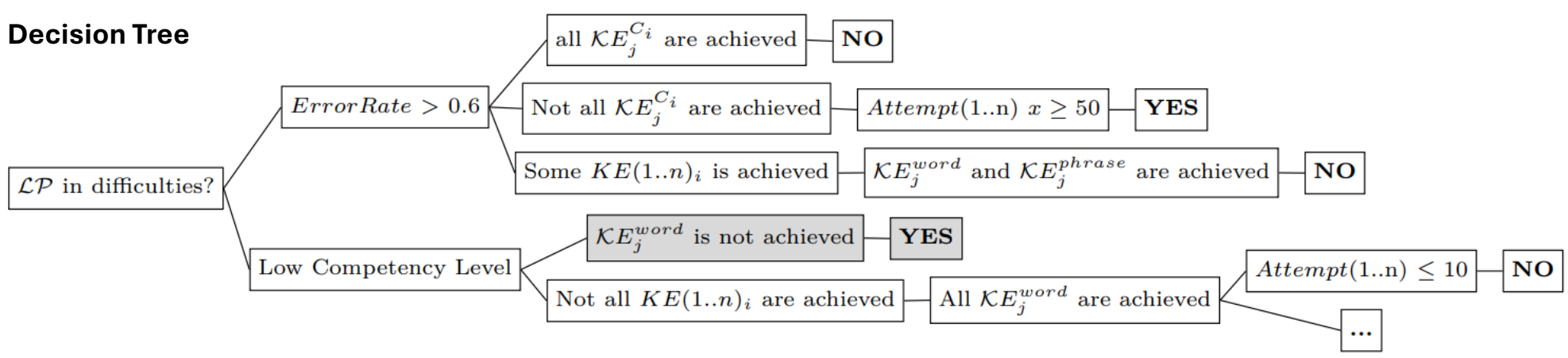
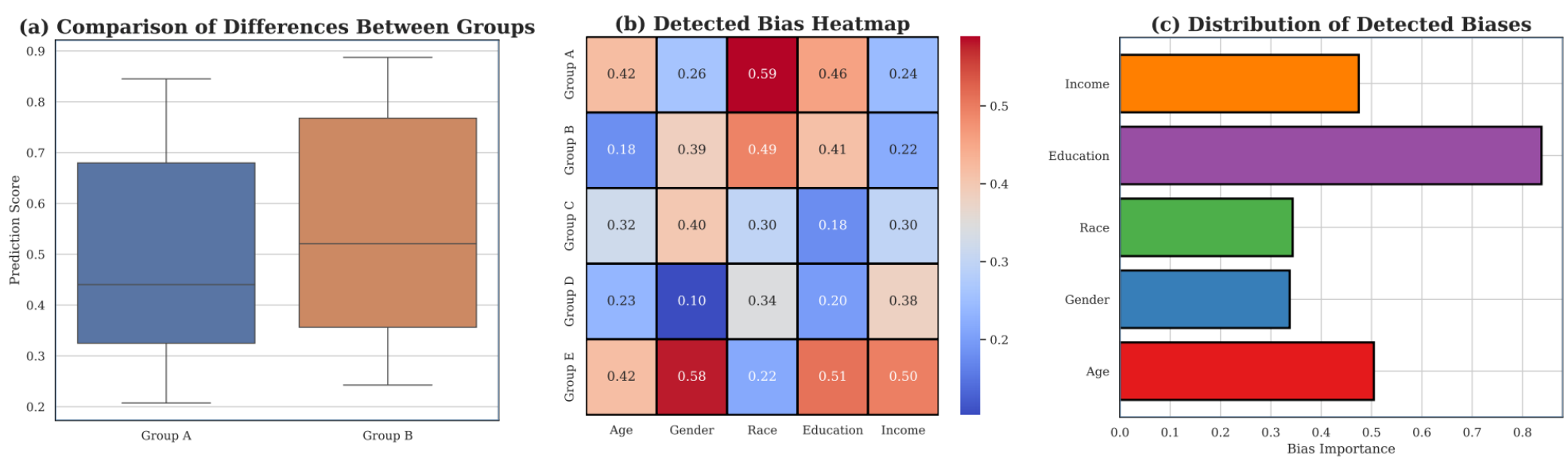
Steps	Example
① **Educational Requirement**	A user wants to identify a set of students in difficulty using **écri+** platforms in a specific competency domain, by considering a set of knowledge elements related to this domain, such as P-GRAM (Grammaire) and P-CONS (Construction) knowledge, , along with detailed information about academic data and resource interactions to support them.
② **Problem/ Goal Validation**	$\mathbf{H_1}$**:** A low learner score may be influenced by whether French is a second or native language $\mathbf{H_2}$ **:** A low learner score may be related to unchecked resources
③ **Testable Factors**	
④ **Data Source (entities/attributes)**	**KnowledgeElements** Answer ID ☑ Assessment ID ☐ Skill ID ☑ **Earned Pix** ☑ User ID ☑ Competence ID ☑ **Status** ☑ **Answers** ID ☑ Value ☐ Result ☑ Result Details ☑ Challenge ID ☑ Assessment ID ☑ Created At ☑ Updated At ☑ Time Out ☑ Time Spent ☑ Is Focused Out ☑ IsBeta ☑ **Assessments** Course ID ☑ Created At ☐ Updated At ☑ User ID ☑ Type ☑ State ☑ Competence ID ☑ Is Improving ☐ Campaign Participation ID ☑ Certification Course ID ☑ Last Question Date ☑ Last Challenge ID ☑ Last Question State ☑ Method ☑ **User** User ID ☑ First Name ☐ Last Name ☑ Birthdate ☑ Birthplace ☑ Status ☑
⑤ **ML Models Exaplanation**	
⑥ **Bias Detection & Fairness**