**Input:** A map of string to string representing the association of layers to their respective filenames in the repository.

**Output:** Layers, which is an object containing all layers or components used to build the game.

function loadXmlComponents

layers : Layers;

jaxbContext : JAXBContext;

file : File;

unmarshaller : Unmarshaller;

**for** layer ϵ layers – {lesson, challenge}

jaxbContext ← JAXBContext.newInstance(layer.class)

unmarshaller ← jaxbContext.createUnmarshaller();

file ← File(xmlFiles.layer);

layers.layer ← unmarshaller.unmarshal(file);

jaxbContext ← JAXBContext.newInstance(lesson.class)

unmarshaller ← jaxbContext.createUnmarshaller();

lessons : Lesson[];

**for** lessonFile ϵ xmlFiles.lessons

lesson : Lesson;

file ← File(lessonFile);

lesson ← unmarshaller.unmarshal(file);

lessons ← lessons ∪ {lesson};

jaxbContext ← JAXBContext.newInstance(challenge.class)

unmarshaller ← jaxbContext.createUnmarshaller();

challenges : Challenge[];

**for** challengeFile ϵ xmlFiles.challenges

challenge : Challenge;

file ← File(challengeFile);

challenge ← unmarshaller.unmarshal(file);

challenges ← challenges ∪ {challenge};

learningObjectives : LearningObjective[];

**for** (lesson ϵ lessons) && (challenge ϵ challenges)

learningObjective : LearningObjective;

lessonActs : LessonAct[];

lessonAct : LessonAct;

lessonAct.lessonScreens ← lesson;

lessonAct.challengeScreens ← challenge;

lessonActs ← lessonActs ∪ {lessonAct};

learningObjective.lessonActs ← lessonActs;

learningObjectives ← learningObjectives ∪ {learningObjective};

layers.learningObjectives ← learningObjectives;

**call** wireUpLayers;