Automation Support for a Methodology for Object-Oriented Analysis & Design Using UML

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TECHNOLOGY NEED
It is said that a quality software system contains two primary intellectual activities. The ability to provide the functionality to do what the user needs to be able to do. And the ease of use, the ability to provide the user with a long list of what it can do, but if it’s not easy to use, even with good help and support, then the software is never going to be great. Which is why, the architectural framework of producing great software requires a methodology that can improve software productivity and software quality.

INVENTION DESCRIPTION/SOLUTION
To address this issue, researchers at UT Arlington have developed a new methodology which allows a software engineer to focus on the development of analysis and design ideas by assisting through the design process and automation of many steps, including the conversion of design artifacts into UML diagrams. Due to its unique properties, the general approach and software support can be used by both beginners and seasoned developers and can be adopted for both agile and plan-driven projects.

APPLICATIONS
- Software development
- Software training module for classes

KEY BENEFITS
- Full automation of generating and displaying easy to understand UML diagram
- Suitable for different level of software development expertise
- Speed of development
- Agile and flexible
- Ease of use

STAGE OF DEVELOPMENT
Prototyped

INTELLECTUAL PROPERTY STATUS
Patent Issued US 8707250 B2