

# Summit Rapid summarisation of software errors





New Technology from DIT









# A software tool that summarises process issues and bug tracking at a glance

SummIt is a new invention created by researchers at the Applied Intelligence Research Centre (AIRC) at DIT in partnership with CeADAR – The National Centre for Applied Data Analytics Research.

The majority of software projects utilise specialised tools to track bugs / issues correction, with Gartner reporting this market to be worth in excess of \$2.5 billion by the end of 2016. However, current product offerings lack a summarised status



overview and do not take into account free text inserted by stakeholders.

Summit overcomes the limitations of current bug/issue tracking software tools by taking into account both structured and free text comments to provide a summarised view of error tracking information in large software projects via an intuitive dashboard. Summaries that Summit generates include:

- Using rule-based transformation to aggregate past events to generate a single summary;
- Using short headlines to describe individual events;
- Important processes are highlighted to bring them to the attention of a manager; and



 Using word clouds to summarise raw text associated with single/ multiple processes.

The dashboard overview window highlights active processes, recent changes and important topics, helping project stakeholders to understand the status of the project and recent changes, and to identify any future problems.

SummIt's strong commercial application lies in the fact that it is more advantageous than present technology, while also having the potential to be extended to CRM software. It doesn't depend on special bug tracking software but instead reads directly from a bug database.



**Above:** The Summit Dashboard provides a quick overview of the status of the system and changes over recent days

## **Applications**

The field of application for SummIt is bug/event tracking, primarily for large-scale software development projects, although the technology could be applied to almost any process.

Bug tracking is an important process in the software industry. Summlt is a single tool that helps software teams to track and plan. Summlt facilitates the correct handling of issues while giving managers a quick oversight of the actual state of each process and its development over time.

SummIt will appeal to software developers operating in the IT infrastructure sector, seeking to bring new and expanded tracking features to market.

### Opportunity

Global research company Gartner says technology that supports the DevOps Toolchain (such as the Issues and Bug Tracking sector in which SummIt will operate) is predicted to grow 21 percent worldwide by the end of 2016, resulting in a total market in excess of \$2.5 billion.

Within its competitive environment SummIt is novel in that it focuses on the needs of managers seeking quick overviews on the status of one or several issues/bugs and of the changes within the system during a given timeframe, while also taking into account the very insightful free text inserted by users and administrators describing the issue.

Its 'summary at a glance' function allows managers to evaluate performance of both the process and employees and to plan for the future.

SummIt can be used by any company in any business sector that wants to create an actionable impact from summarised data. SummIt's delivery of more comprehensive information also facilitates the generation of more targeted reports. "What makes SummIt such an exciting invention is that it provides a summarised view of error tracking information at a glance."

#### **Advantages**

SummIt has a number of advantages over and above existing issue and bug tracker systems:

- Summarised Overview The SummIt Dashboard provides a quick overview on the status of the system and the changes in recent days.
- Detailed Information SummIt's Timeline provides an overview of the status of a single bug within its context and its change over time.
- Feature Rich SummIt's richer features help build better software by providing detailed reports of errors, bugs, exceptions and issues in summarised format, at a glance.
- Boosts Productivity SummIt will help boost productivity via its oversight function and its ability to produce enough useful information to plan ahead.

#### Stage of Development

SummIt has been developed in DIT's Applied Intelligence Research Centre (AIRC) in partnership with CeADAR – The National Centre for Applied Data Analytics Research.

DIT is currently seeking expressions of interest from potential licensees interested in using the technology for software bug/issue tracking purposes, or business partners interested in deploying it as a commercial system. The technology may be licensed through the CeADAR Technology Centre.

#### **Technology Readiness Level (TRL)**



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