## Reports

Survey short title: KANO\_SCRUM

Question number: 35

Number of variables:

74

You are cordially invited to participate in a study on AI software features for SCRUM methodology. The research is carried out by the University of Ljubljana (Faculty of Computer and Information Science).

Estimated time to complete this survey is 5 - 7 minutes.

Participation in the study is voluntary and anonymous. Anonymous data may be shared in permanent and publicly accessible data archives. By taking this survey, you consent to participate in the study. You can leave the survey at any point in time. Please take the survey only once.

The study was approved by the Ethics Committee of the University of Ljubljana, Faculty of Computer and Information Science.

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ProlificID - Yo	our Prolific ID:
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#### Example -

The core of the questionnaire is based on two questions about your feelings regarding the availability of a specific feature.

For example, most people today think air conditioning is a necessary feature of a car. Although most people do not like that there is no air conditioning in the car, some people can live with it. They would answer the question as follows:

The air conditioner in the car allows the interior of the car to cool down. This means that even though it is very hot outside, you can have a pleasant temperature in the car.  How do you feel when the air conditioner:					
	I like it	I expect it	I am neutral	I can live with it	I dislike it
is available	0	•	0	0	0
is not available	0	0	0	•	0

Intro -

In the continuation, you will be asked to answer similar questions regarding possible (future) AI features to support SCRUM methodology as follows:

You are given an example of an AI software feature (marked in green), followed by the question of how you feel if such a software feature is or would be available (marked in blue) and the question of how you feel if such a feature is not or would not be available (marked in orange):

How do/would you fe	eel when the softwar	e feature:			
		I like it	l expect it lan	n neutral I can live with it	I dislike it
is available		0	0	0 0	0
is not available		0	0	0 0	0
	swer the hypo		•	ble in existing SCI ould feel if such a	
art - Answer the qu	estions below				
				ling change reque	ests) with
		n of new requi would you feel v			ests) with I dislike
isting requirem available	ents. How do/	would you feel w	when the softwa	are feature:	-
isting requirem available not available ANO2 - Automa	ents. How do/	would you feel was a second of repetitive	when the softwa I am neutral O O e elements in th	are feature:	I dislike
isting requirem available not available ANO2 - Automa	ents. How do/ I like it C C atic identificato/ b/would you fe	would you feel was a second of repetitive seel when the sof	when the softwa I am neutral C C e elements in th tware feature:	are feature: I can live with it    output  be product backlog	I dislike
isting requirem available not available ANO2 - Automa ics, etc.)How do	ents. How do/	would you feel was a second of repetitive	when the softwa I am neutral O O e elements in th	are feature: I can live with it    output  be product backlog	I dislike O O (user stor I dislike
isting requirem available not available ANO2 - Automa	ents. How do/ I like it C C atic identificato/ b/would you fe	would you feel was a second of repetitive seel when the sof	when the softwa I am neutral C C e elements in th tware feature:	are feature: I can live with it    output  be product backlog	I dislike
isting requirem  available not available  ANO2 - Automatics, etc.)How do  available not available  ANO3 - Autom	ents. How do/ I like it Common dentificate b/would you for the it Common dentificate it	would you feel was a second of the second of	when the software lam neutral	are feature: I can live with it    output  be product backlog	I dislike    Output
isting requirem  available  not available  ANO2 - Automa  ics, etc.)How do  available  not available	ents. How do/ I like it Catic identificate o/would you for the it Catic generation	tion of repetitive eel when the sof lexpect it	when the software lam neutral control	re feature: I can live with it  re product backlog I can live with it  re ural language des	I dislike  Graph (user store)  I dislike  Graph (user store)  Contact (user store)  Cont
isting requirem  available not available  ANO2 - Automatics, etc.)How do  available not available  ANO3 - Autom	ents. How do/ I like it Common dentificate b/would you for the it Common dentificate it	would you feel was a second of the second of	when the software lam neutral	re feature: I can live with it  can live with it  can live with it  can live with it	I dislike    Oscillation     O

Automatic generation of coding recommendations for new user stories based on existing user

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**KANO4** -

stories code.

#### SCRUM\_AI\_functionalities How do/would you feel when the software feature: I like it I expect it I am neutral I can live with it I dislike it is available is not available **KANO5** -Automatic creation of "release notes" for users from user stories, change requests, code, etc. How do/would you feel when the software feature: I can live with it I dislike it I like it I expect it I am neutral is available is not available **KANO6** -Automatic generation of meeting minutes from meeting voice records or meeting transcripts (for meetings like retrospective, sprint review, daily stand-up, etc.). How do/would you feel when the software feature: I like it I can live with it I dislike it I expect it I am neutral is available is not available **KANO7** -Automatic generation of summaries (e.g., key results, standard overview, etc.) of larger documents (e.g., technical documentation, standards, regulatory documents, etc.). How do/would you feel when the software feature: I like it I expect it I am neutral I can live with it I dislike it is available is not available **KANO8 -**Automatic suggestion of the most effective next step in the development process based on available information regarding the project's current state (including project documentation, code, design models, etc.) tailored to a specific project team member. How do/would you feel when the software feature: I can live with it I dislike it I like it I expect it I am neutral is available is not available **KANO9** -Automatic checking of requirements quality (e.g., unambiguous, complete, consistent, etc.) to help customers and/or analysts specify requirements.

How do/would you feel when the software feature:

SCRUM_AI_fun	ctionalities				
	I like it	I expect it	I am neutral	I can live with it	I dislike it
is available is not available	0	0	0	0	0
KANO10 -					
Automatic valida requirements are		am code with th	e correspondin	g user stories to s	show that all
How do/would yo				. e si s	
is available	l like it	· <u>-</u>		.=.	I dislike it
is not available	0		0	0	0
KANO11 -					
Automatic analys	is of the impa	ct of a new user	story on other pa	arts of the project.	
How do/would yo	ou feel when th	ne software featu	ıre:		
,	I like it	I expect it		I can live with it	I dislike it
is available is not available	0	0	0	0	0
KAN012 -					
Automatic prepa summary and loc				g., the current sta st practices, etc.).	itus of work,
How do/would yo	ou feel when th	ne software featu I expect it	ı <b>re:</b> I am neutral	I can live with it	I dislike it
is available					)
is not available	ŏ	Ö	Ŏ	Ŏ	Ŏ
KAN013 -					
Automatic sugge	stion of the m	ost suitable men	nbers for the Scr	um team for a spe	cific project.
How do/would yo					
is available	l like it	l expect it	I am neutral	I can live with it	I dislike it
is not available	0	0		0	0
KAN014 -					
Automatic estima	ation of the eff	ort needed to co	mplete a specifi	c user story.	
How do/would yo					
is available	I like it	I expect it	I am neutral	I can live with it	I dislike it
is available is not available	0			0	0

#### **KANO15** -

Automatic suggestion of priority for each user story based on descriptions of other user stories and, if available, additional information on general project priorities.

How do/would you	ı <b>feel when th</b> I like it	ne software featu I expect it		I can live with it	I dislike it
is available is not available	() ()				
KAN016 -					
Automatic genera stories are too larg		ementable tasks	based on use	r stories (in a cas	e when usei
How do/would you	ı <b>feel when th</b> I like it			I can live with it	I dislike it
is available is not available	0	0	0	0	0
KAN017 -					
Automatic genera information (e.g., p be used in sprint re	process tool l	-			
How do/would you	ı <b>feel when th</b> I like it			I can live with it	I dislike it
is available is not available	0		0	0	0
<b>KANO18</b> -					
Automatic general based on textual d				a models, process	models, etc.)
How do/would you	ı <b>feel when th</b> I like it	ne software featu I expect it	<b>ire:</b> I am neutral	I can live with it	I dislike it
is available	0	0	0	0	
is not available			0		0
DEM1 - What is you Multiple answers are p Product Owner Development Te Scrum Master	ossible.	a typical SCRUM	methodology (ı	multiple answers a	re possible):
DEM2 - Which of the Please select only one.		describes your cu	urrent job, the o	ne you do most of	the time?

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<ul> <li>Developer, full-stack</li> <li>Developer, back-end</li> <li>Developer, desktop or enterprise applications</li> <li>Developer, mobile</li> <li>Engineering manager</li> <li>Student</li> <li>Developer, embedded applications or devices</li> <li>Data scientist or machine learning specialist</li> <li>Devolops specialist</li> <li>Academic researcher</li> <li>Research &amp; Development role</li> <li>Senior Executive (C-Suite, VP, etc.)</li> <li>Engineer, data</li> <li>Cloud infrastructure engineer</li> <li>Developer, game or graphics</li> <li>Data or business analyst</li> <li>System administrator</li> <li>Project manager</li> <li>Developer, QA or test</li> <li>Security professional</li> <li>Product manager</li> <li>Engineer, site reliability</li> <li>Educator</li> <li>Scientist</li> <li>Developer Experience</li> <li>Blockchain</li> <li>Hardware Engineer</li> <li>Developer Advocate</li> <li>Marketing or sales professional</li> </ul>
DEM3 - NOT including education, how many years have you been involved in software development professionally (as a part of your work)?
DEM5 - What is your age?

#### O I don't know

#### DEM7 - Where do you live?

Afghanistan

Albania

Algeria

Andorra

Angola

Antigua and Barbuda

Argentina

Armenia

Australia

Austria

Azerbaijan

Bahamas

Bahrain

Bangladesh

Barbados

Belarus

Belgium

Belize

Benin

Bhutan

Bolivia

Bosnia and Herzegovina

Botswana

Brazil

Brunei

Bulgaria

Burkina Faso

Burundi

Côte d'Ivoire

Cabo Verde

Cambodia

Cameroon

Canada

Central African Republic

Chad

Chile

China

Colombia

Comoros

Congo (Congo-Brazzaville)

Costa Rica

Croatia

Cuba

Cyprus

Czechia (Czech Republic)

Democratic Republic of the Congo

Denmark

Djibouti

Dominica

Dominican Republic

Ecuador

Egypt

El Salvador

**Equatorial Guinea** 

Eritrea

Estonia

Eswatini (fmr. "Swaziland")

Ethiopia

Fiji

Finland

France

Gabon

Gambia

Georgia

Germany

Ghana

Greece

Grenada

Guatemala

Guinea

Guinea-Bissau

Guyana

Haiti

Holy See

Honduras

Hungary

Iceland

India

Indonesia

Iran

Iraq

Ireland

Israel

Italy

Jamaica

Japan

Jordan

Kazakhstan

Kenya

Kiribati

Kuwait

Kyrgyzstan

Laos

Latvia

Lebanon

Lesotho

Liberia

Libya

Liechtenstein

Lithuania

Luxembourg

Madagascar

Malawi

Malaysia

Maldives

Mali

Malta

Marshall Islands

Mauritania

Mauritius

Mexico

Micronesia

Moldova

Monaco

Mongolia

Montenegro

Morocco

Mozambique

Myanmar (formerly Burma)

Namibia

Nauru

Nepal

Netherlands

New Zealand

Nicaragua

Niger

Nigeria

North Korea

North Macedonia

Norway

Oman

Pakistan

Palau

Palestine State

Panama

Papua New Guinea

Paraguay

Peru

**Philippines** 

Poland

Portugal

Qatar

Romania

Russia

Rwanda

Saint Kitts and Nevis

Saint Lucia

Saint Vincent and the Grenadines

Samoa

San Marino

Sao Tome and Principe

Saudi Arabia

Senegal

Serbia

Seychelles

Sierra Leone

Singapore

Slovakia

Slovenia

Solomon Islands

Somalia

SCRUM_AI_functionalities	
South Africa South Korea South Sudan	
Spain Sri Lanka	
Sudan Suriname	
Sweden	
Switzerland Syria	
Tajikistan	
Tanzania Thailand	
Timor-Leste	
Togo Tonga	
Trinidad and Tobago	
Tunisia Turkey	
Turkmenistan	
Tuvalu Uganda	
Ukraine	
United Arab Emirates United Kingdom	
United States of America	
Uruguay Uzbekistan	
Vanuatu	
Venezuela Vietnam	
Yemen	
Zambia Zimbabwe	
Zimbabwe	
DEM8 - How many people are in the S	CPUM team you are part of?
Demo - now many people are in the 5	CROW team you are part of .
DEM9 - What industry is the company	you work for in?
Multiple answers are possible. We are interested list, you can also add your category.	d in which industries you develop software for. If the industry is not on the
☐ Information Services, IT, Software Dev	velopment, or other Technology
Financial Services Other	
Manufacturing, Transportation, or Su	pply Chain
☐ Healthcare ☐ Retail and Consumer Services	
☐ Higher Education	
Advertising Services Insurance	
Oil & Gas	
Legal Services Wholesale	
Other:	
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DEM10 - Which parts of your development workflow are you currently using AI tools for and which are you interested in using AI tools for over the next year? Please select all that apply.
Multiple answers are possible  Writing code
Debugging and getting help
Documenting code
Learning about a codebase
Testing code Project planning
Committing and reviewing code
Deployment and monitoring
Collaborating with teammates
DEM11 - What is the largest project you worked on using the SCRUM methodology in terms of financial scope (budget)?  < \$ 200,000
\$ 200,000 \$ 200,001 – \$ 400,000
○ \$ 401,000 – \$ 600,000
( \$ 600,001 – \$ 800,000 ( ) 4 801,000 ( ) 4
<ul><li>○ \$801,000 – \$1 million</li><li>○ &gt; \$1 million – \$10 million</li></ul>
> \$ 10 million
O Don't know
DEM12 -
What is the largest project you worked on using the SCRUM methodology in terms of duration?
(Maximum duration). We mean development exclusively - software maintenance/support is not included.
<ul><li>&lt; 6 months</li><li>6 – 12 months</li></ul>
○ 13 – 18 months
○ 19 – 24 months
<ul><li>25 – 30 months</li><li>31 – 36 months</li></ul>
> 36 months