

G and D Requirements Overview

* Indicates required question

1. What is your role at your company? *

2. How often does your role involve working with Software Requirements? *

Mark only one oval.

☐ Always

☐ Often

☐ Sometimes

☐ Rarely

☐ Never

☐ Other:

3. Alternative Names for D and G Requirements: What other categories/names would you add as alternatives to **D** Requirement?

D Requirement	G Requirement
Use Case: Variation/Exception	Use Case: New/Independent
Internal	External
Non-E-Type	E-Type
Req Needed to Build the System Right	Req Needed to Build the Right System
Dependent/Implied/Interacting	Independent/Axiom/Orthogonal
Update	New Release
Revision ($Vx.Rn \rightarrow Vx.Rn+1$)	New Version ($Vx.Rn \rightarrow Vx+1.R1$)
Maintain Consistency	Add New Feature
System Req	Environment/World Req
White Box Req	Black Box Req

4. Alternative Names for D and G Requirements: What other categories/names would you add as alternatives to **G** Requirement?

D Requirement	G Requirement
Use Case: Variation/Exception	Use Case: New/Independent
Internal	External
Non-E-Type	E-Type
Req Needed to Build the System Right	Req Needed to Build the Right System
Dependent/Implied/Interacting	Independent/Axiom/Orthogonal
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White Box Req	Black Box Req

5. Is there anything you would like to share with us regarding the "G and D Requirements Overview" presentation that was not mentioned above?

6. "A telephone number is a sequence of digits assigned to a landline telephone subscriber station connected to a telephone line or to a wireless electronic telephony device, such as a radio telephone or a mobile telephone, or to other devices for data transmission via the public switched telephone network (PSTN) or other public and private networks.

A telephone number serves as an address for switching telephone calls using a system of destination code routing." [https://en.wikipedia.org/wiki/Telephone_number]

Thus, a telephone number uniquely identifies a device, the target device, to which one might wish to send a text (SMS) message.

"Short Message/Messaging Service, commonly abbreviated as SMS, is a text messaging service component of most telephone, Internet and mobile device systems. It uses standardized communication protocols that let mobile devices exchange short text messages. An intermediary service can facilitate a text-to-voice conversion to be sent to landlines....

The service allows users to send and receive messages of up to 160 characters (when entirely alpha-numeric) to and from GSM mobiles.

Although most SMS messages are sent from one mobile phone to another, support for the service has expanded to include other mobile technologies, such as CDMA networks and Digital AMPS." [https://en.wikipedia.org/wiki/Telephone_number]

Thus, SMS allows sending a text message of up to 160 characters to a target device via the target device's uniquely identifying telephone number.

Scope, consisting of Requirements R1, R2, and R3:

R1. A cellphone is able to send a text message of up to 160 characters to a target device identified by a telephone number.

R2. A cellphone is able to receive a text message of up to 160 characters from a source device identified by a telephone number.

R3. A cellphone that has sent a text message to a target device receives an acknowledgment when the sent text message is delivered to the target device.

For the rest of this Questionnaire, Please identify each requirement whether it is a G or D with reference to the scope, consisting of Requirements R1, R2, and R3.

Note: *If you had any concerns assumptions when you answered the rest of the questions, please share them with us here.*

7. If the target device is shut down, then delay the transmission until the device is back on.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

8. A text message can be an image.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

9. If the target device is not capable of receiving text messages, don't transmit the message and inform the user.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

10. A text message can be a file of any format.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

11. If the phone number to which a message is being sent is not associated with any device, don't transmit the message and inform the user.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

12. If the target device of a text message is a cellphone, use the SMS network for transmitting the text message.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

13. If the target device of a text message is a landline phone, use the PSTN for transmitting the text message.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

14. If the phone number to which a message is being sent is not well-formed, don't transmit the message and inform the user.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

15. The acknowledgement of delivery of a text message shows the text message's recipient's phone number and arrival date and time.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

16. Pair a cellphone being used to send and receive text messages with a computer so that the computer's message app can send and receive text messages via the cellphone, as if the computer were the cellphone; the text messages are stored in the cellphone.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

17. An arriving text message shows the text message's sender's phone number and arrival date and time.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

18. If both the sending cellphone and the receiving device of a text message are currently connected to the Internet, use the Internet for transmitting the text message.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

19. An arriving text message shows the text message's sender's phone number and sending date and time.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

20. A text message can be sent to a set of telephone numbers.

Mark only one oval.

☐ G Requirement.

☐ D Requirement.

Lastly,

Make a completely voluntary decision of whether to submit your answers. If you consent, then submit your answers, and we will receive them. If you do not consent, then do not submit your answers, and we will receive no answers from you. It is that simple! In either case, we do not know who you are, unless you tell us in some free-text answer. Your having filled out the questionnaire and having submitted your answers is taken as proof of your having consented to our knowing and publishing whatever is in your answers, including the free-text answers.

Please look at our feedback to you. To read this feedback, [click this sentence](#).

Thank you for your participation.

If, independently of participation, you would like to receive a copy of whatever report we generate from the data, please send e-mail to one of

Daniel Berry <dberry@uwaterloo.ca>

Marcia Lucena <marciaj@dimap.ufrn.br>

Victoria Sakhnini <vsakhnini@uwaterloo.ca>

While we might be able to say that you probably participated, since your data does not identify you, we have no way to correlate you with your data.



