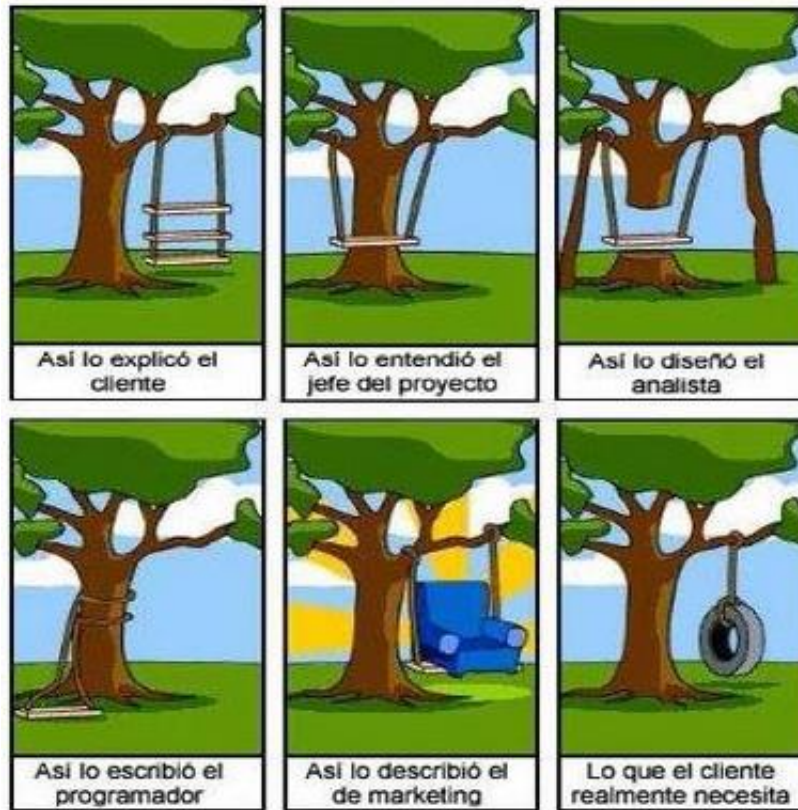


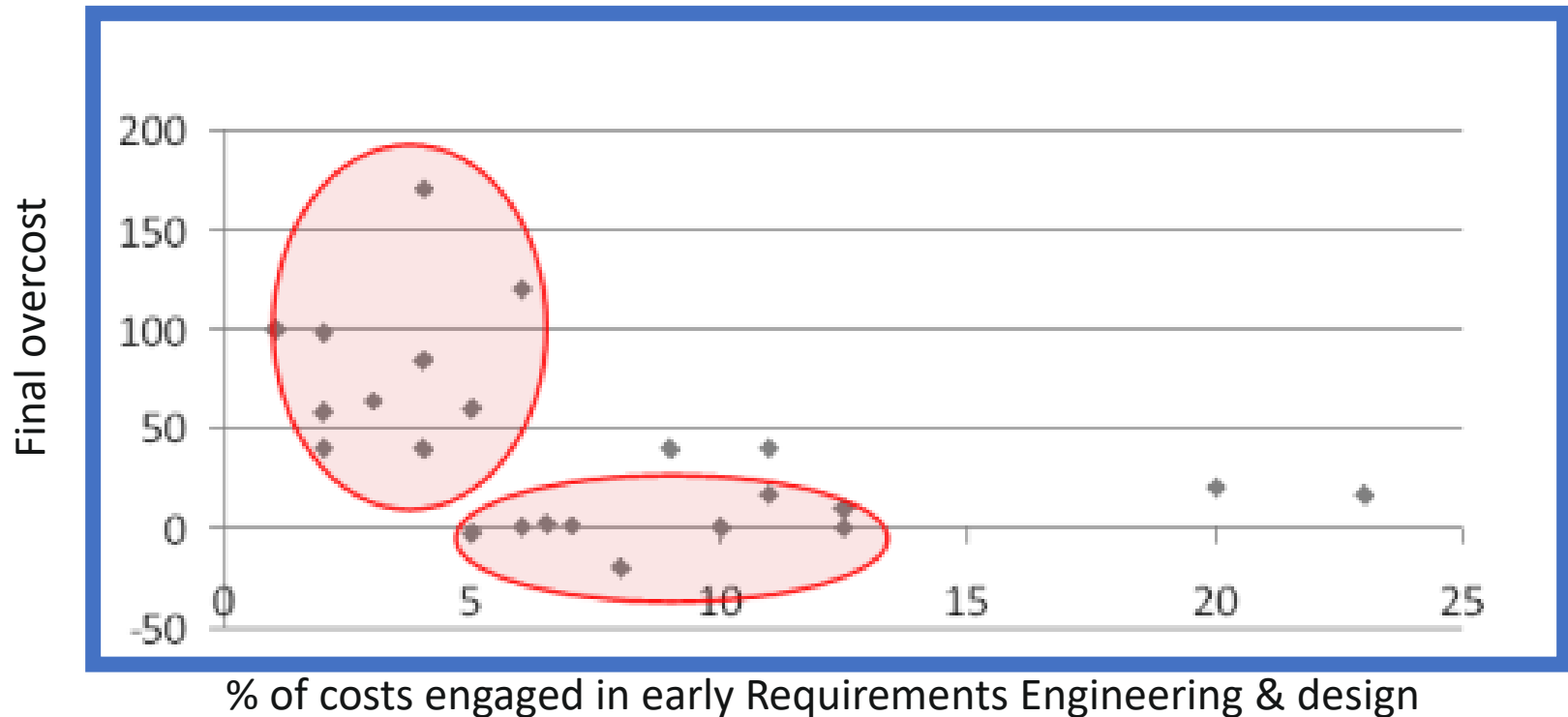
# Requirements specification template

**Natural language is the most important means to communicate requirements.** At the same time it is particularly **important to agree on a common terminology and structure.**

When communicating, all participants must deal consciously with **focusing and simplification.**



The less you invest in requirements engineering at the beginning of the project, the more the project cost will increase.



« Requirements Engineering was a powerful **key success factor for new product development projects.** »

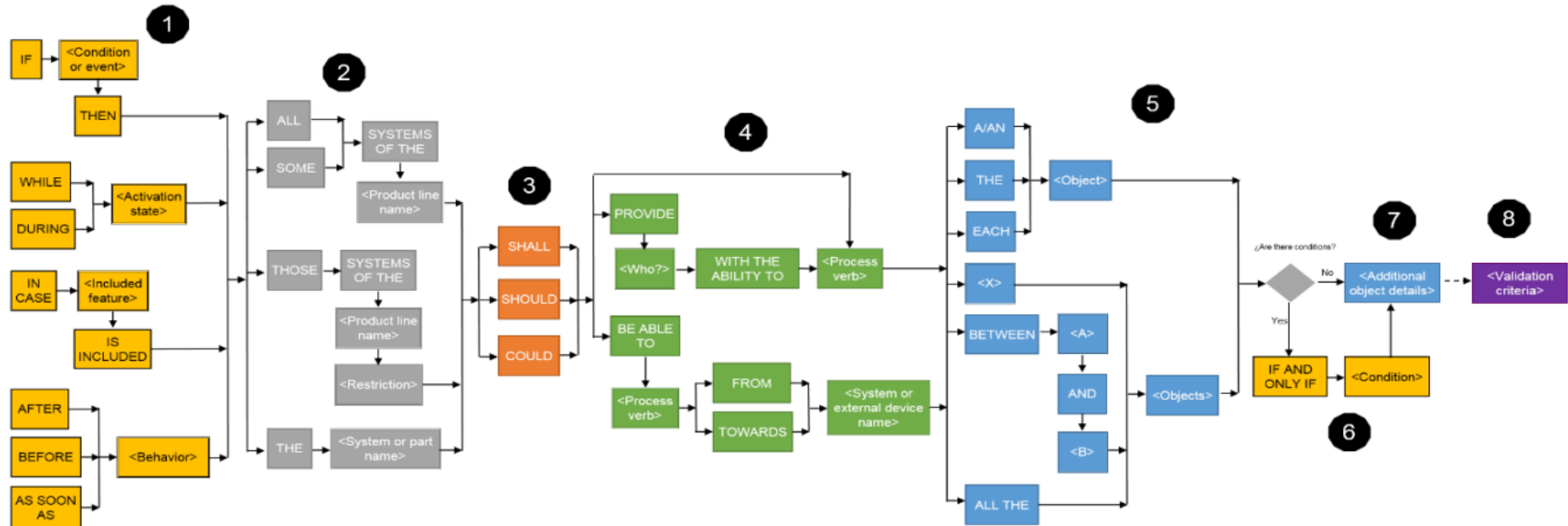
(source : Vinci Consulting)

# Requirements specification template

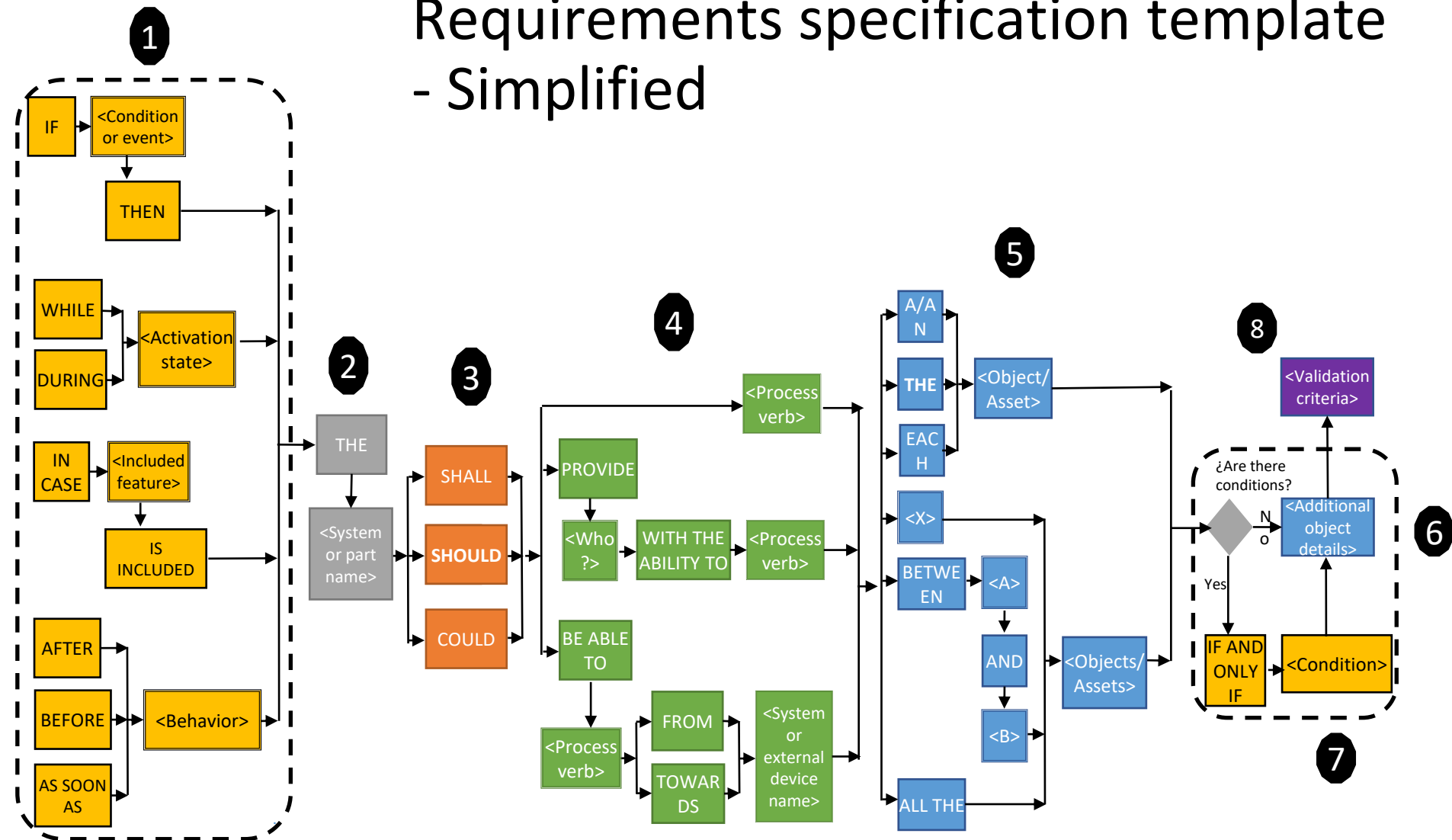
We will use a template to specify requirements, inspired by several scientific works such as:

- Mazo, R., Jaramillo, C. A., Vallejo, P., & Medina, J. H. (2020). **Towards a new template for the specification of requirements in semi-structured natural language**. Journal of Software Engineering Research and Development, 8, 3.
- Hnaini, H., Mazo, R., Vallejo, P., Galindo, J., & Champeau, J. (2023, April). **Taxonomy of Requirements Specification Templates**. In SoftEng 23.
- Hnaini, H., Mazo, R., Vallejo, P., Lopez, A., Champeau, J., & Galindo, J. (2024, January). **Secret: a new security requirements specification template**. In International Conference on Information Technology & Systems (pp. 235-246). Cham: Springer Nature Switzerland.

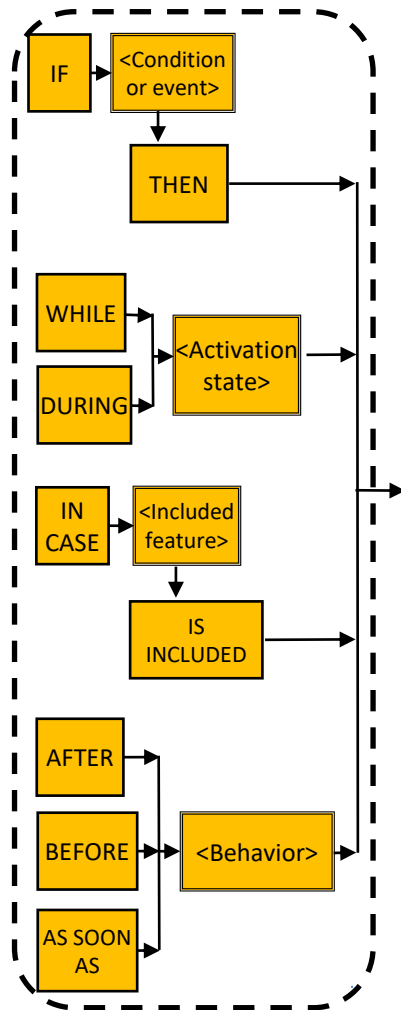
# Requirements specification template - Original



# Requirements specification template - Simplified



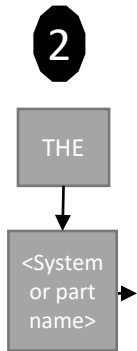
1



## Conditions under which a behavior occurs (optional)

- Requirements with logical conditions (IF <Condition> THEN).
- Requirements guided by the state (WHILE | DURING <Activation state>).
- Requirements with optional elements (IN CASE <Included feature> IS INCLUDED).
- Requirements with temporary conditions (AFTER | BEFORE | AS SOON AS <Behavior>).

# The system

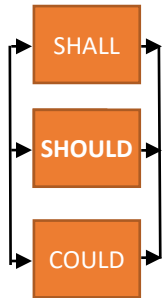


- System name (THE ShopEase SYSTEM).
- Part of the system name (THE Payment module).



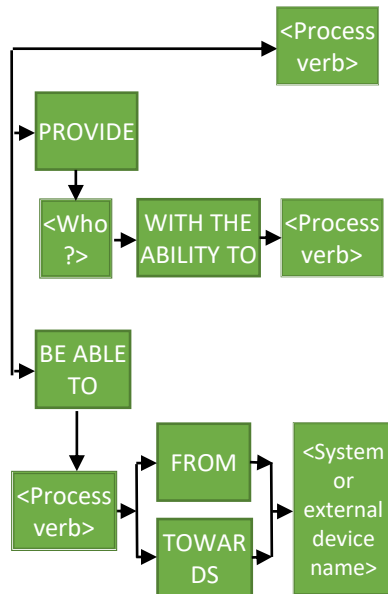
## The degree of priority

3



- Essential requirements (SHALL).
- Recommended requirements (SHOULD).
- Desirable requirements (COULD).

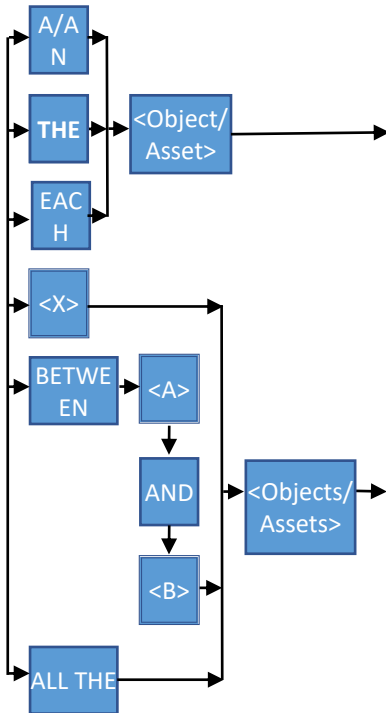
4



## The activity

- Autonomous activity: There is no user involved, which means that the system initiate and execute the behavior autonomously (THE <System or part name>) SHALL|SHOULD|COULD <Process verb>).
- User interaction: the system provide a user with the ability to use certain behavior that is initiated or stimulated by a user that interacts with the system (THE <System or part name>) SHALL|SHOULD|COULD PROVIDE <Who?> WITH THE ABILITY TO <Process verb>).
- Interface requirement: The system performs a behavior dependent on another entity, which can be another system or a physical device (THE <System or part name>) SHALL|SHOULD|COULD BE ABLE TO FROM|TOWARDS <Process verb>).

5

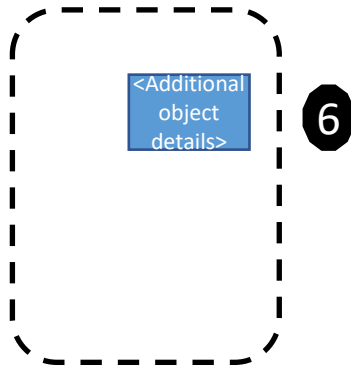


## The object or objects

- Single object (A | AN <Object>).
- Specific object (THE <Object>).
- Each object of a set (EACH <Object>).
- Multiple objects (X <Objects>).
- Range of objects (BETWEEN <A> AND <B> <Objects>).
- All objects in a set (ALL THE <Objects>)

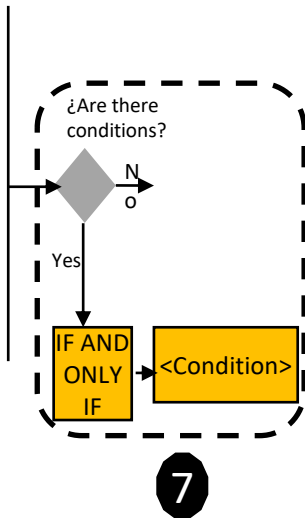
## The complementary details (optional)

- Complementary details of the object are specified



## Conditionality in the object (optional)

- Conditionality in the object (IF AND ONLY IF <Condition>).



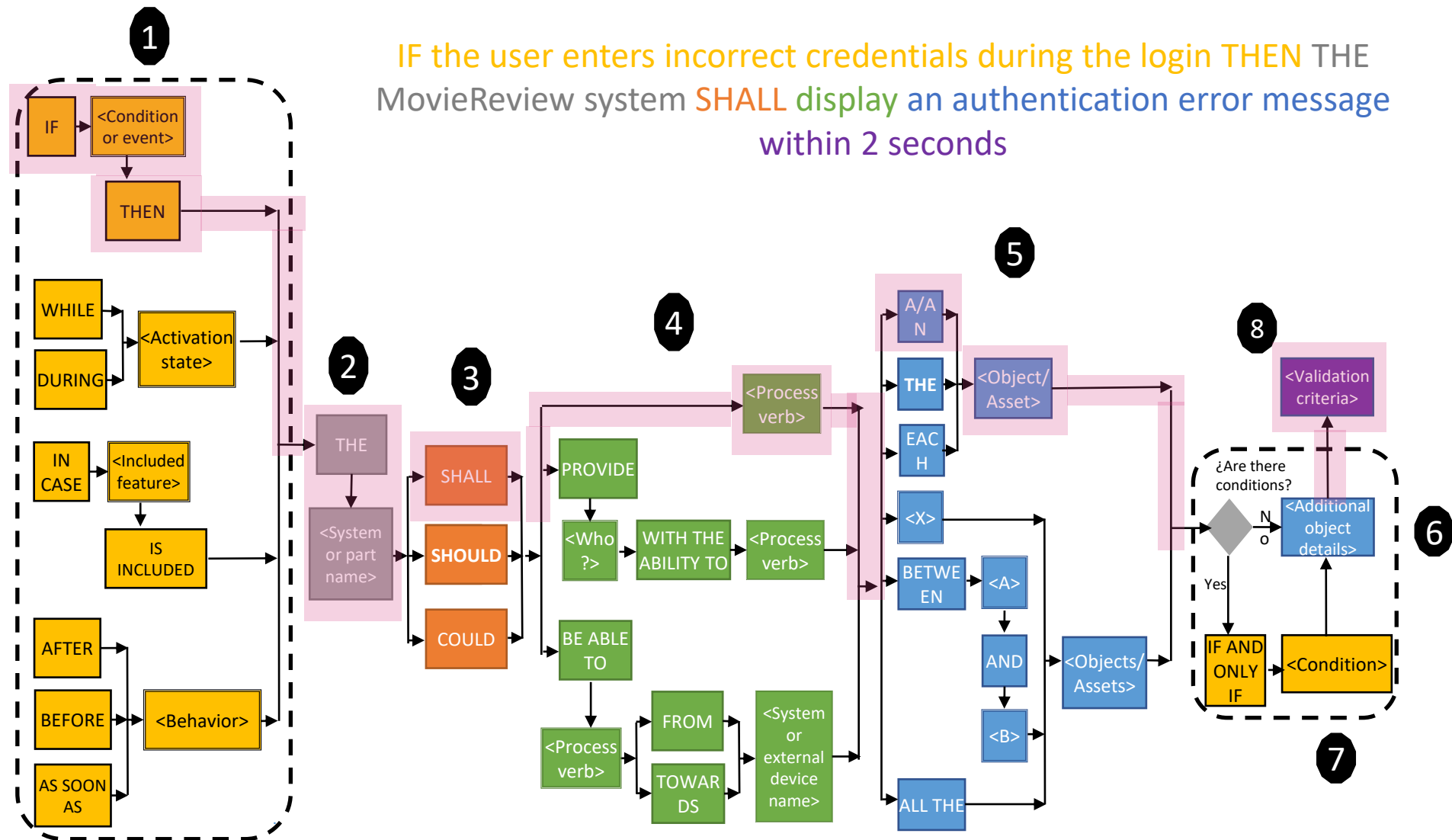
## Validation criteria

- Needed for testing.

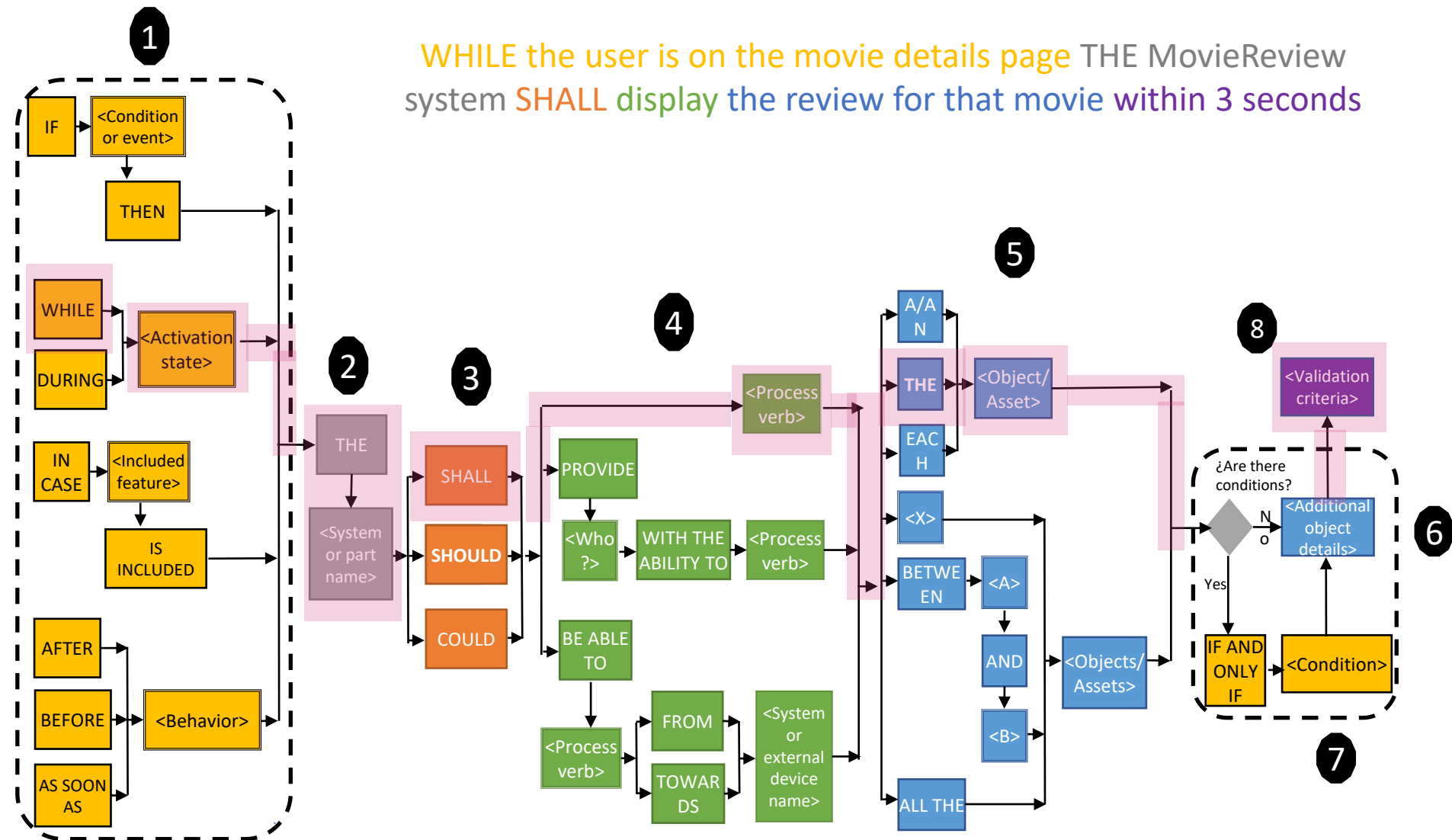
8

<Validation  
criteria>

IF the user enters incorrect credentials during the login THEN THE MovieReview system SHALL display an authentication error message within 2 seconds

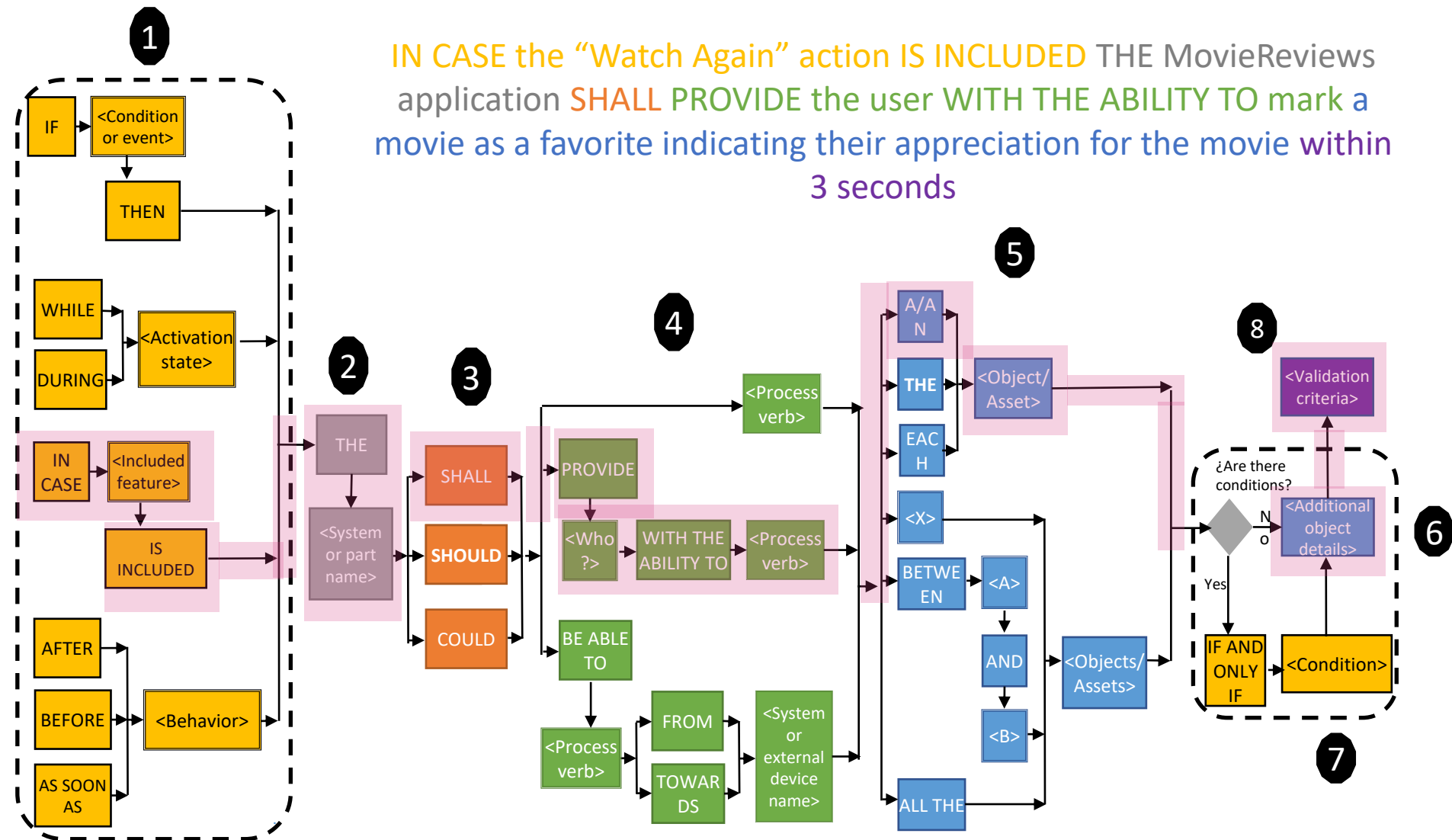


WHILE the user is on the movie details page THE MovieReview system SHALL display the review for that movie within 3 seconds

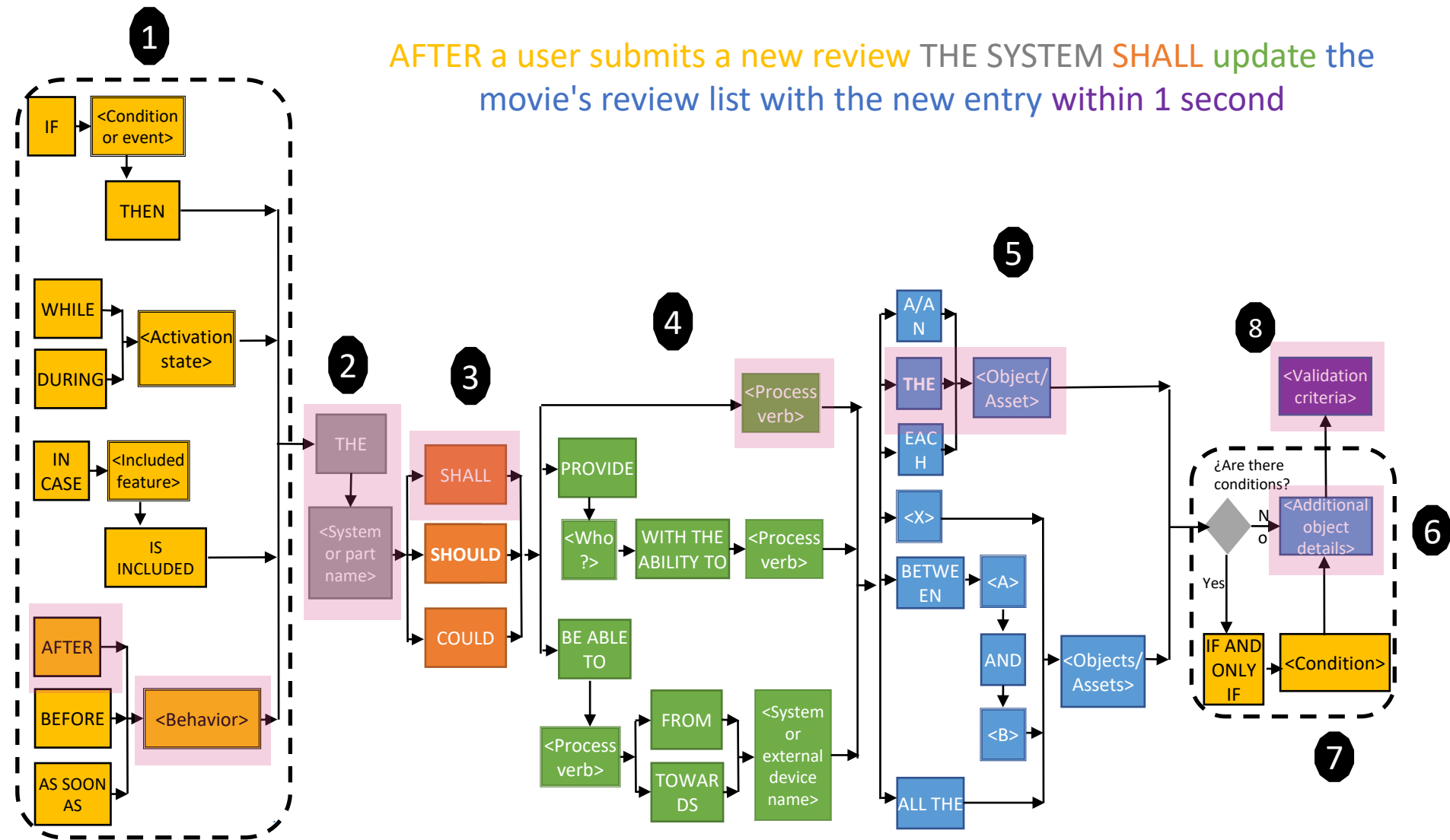




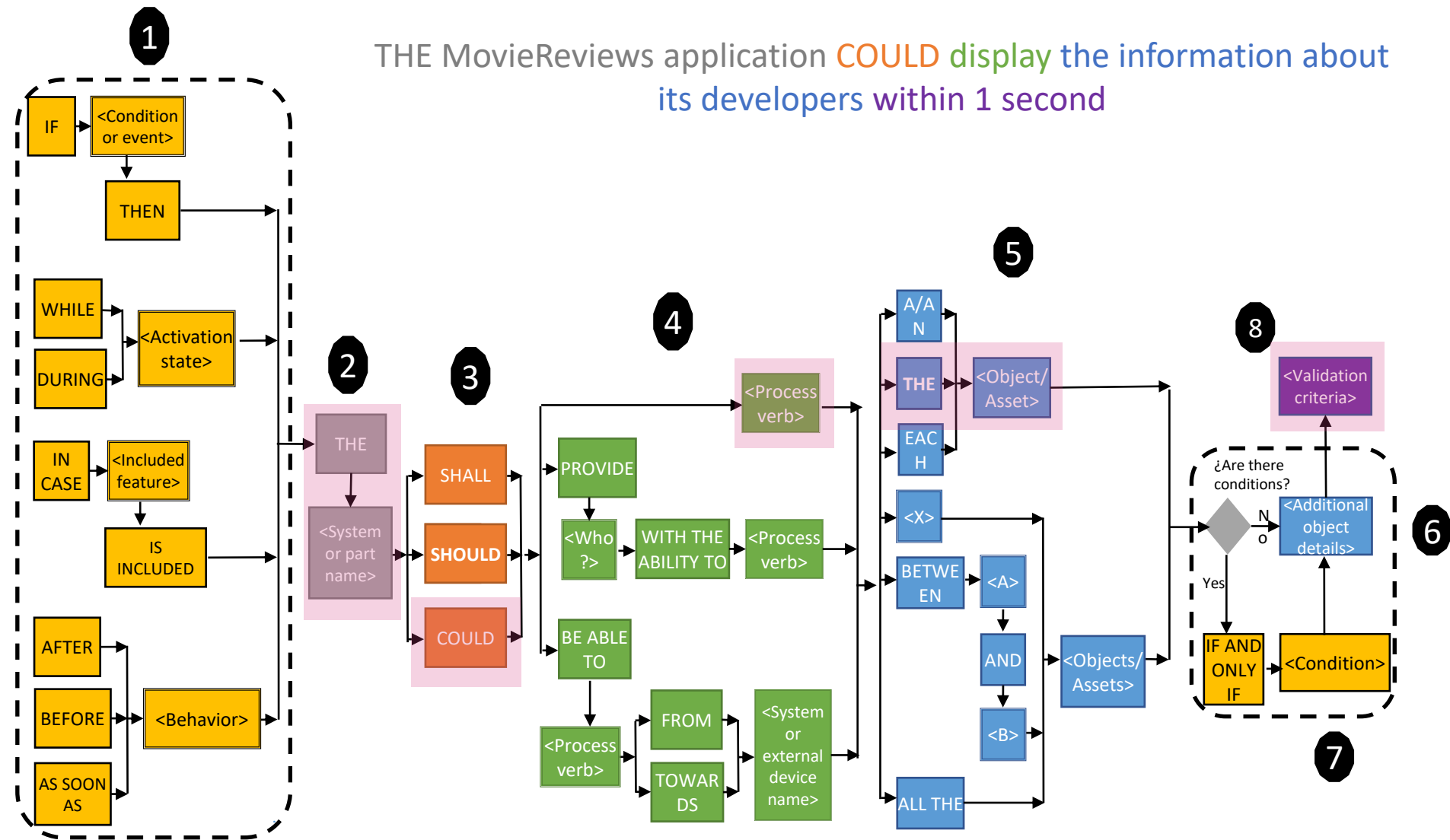
IN CASE the “Watch Again” action IS INCLUDED THE MovieReviews application SHALL PROVIDE the user WITH THE ABILITY TO mark a movie as a favorite indicating their appreciation for the movie within 3 seconds



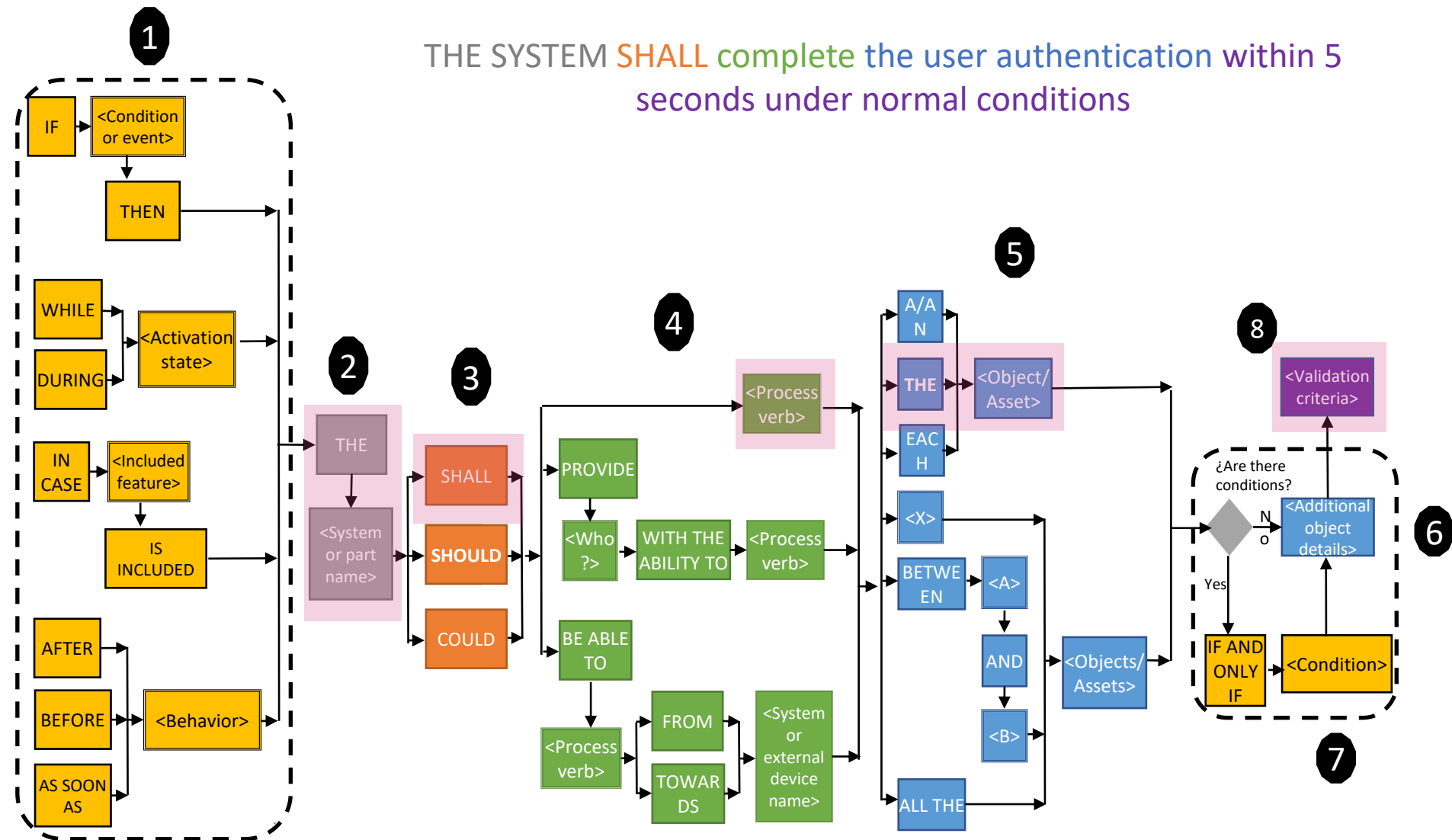
AFTER a user submits a new review THE SYSTEM SHALL update the movie's review list with the new entry within 1 second



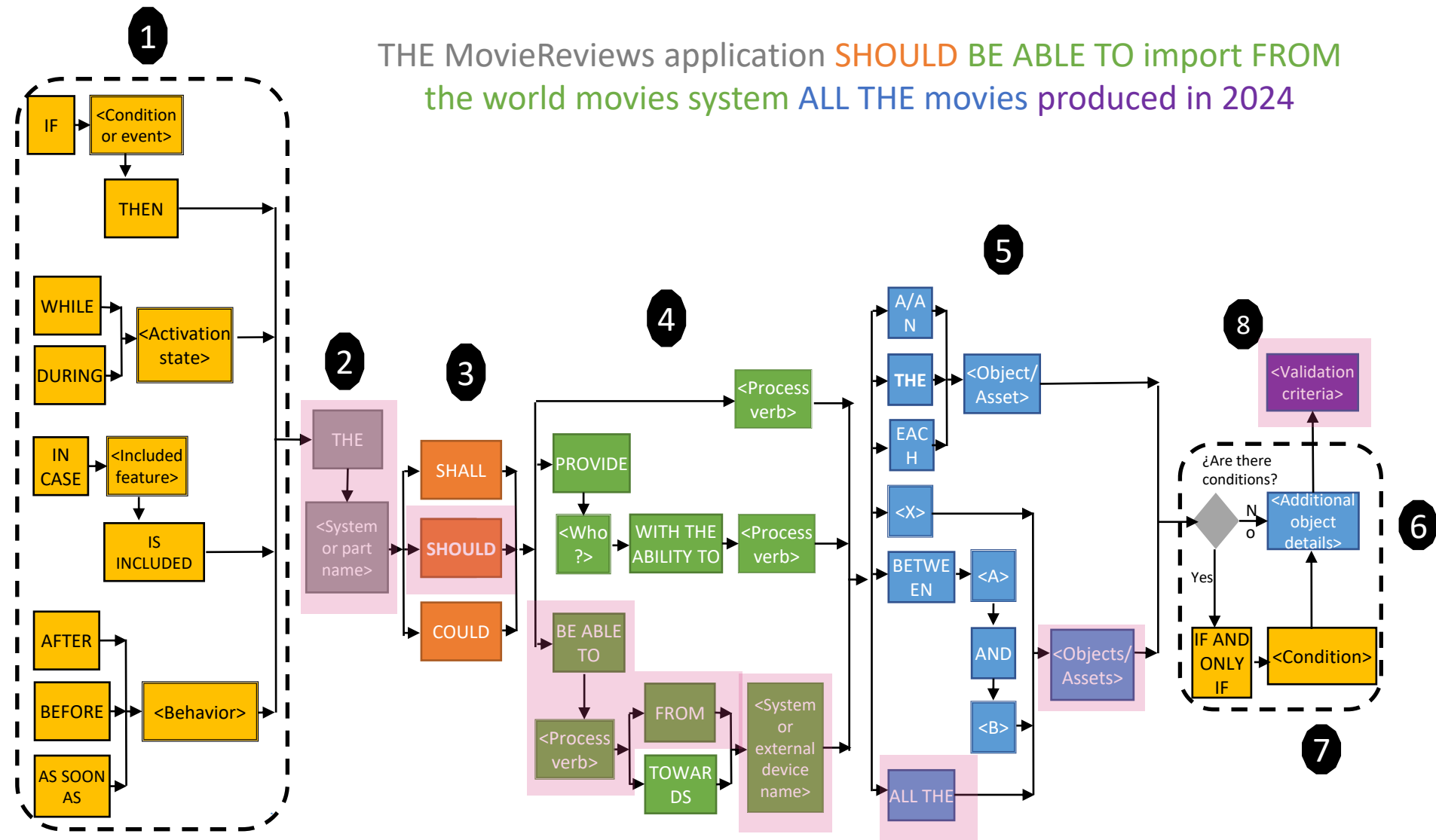
THE MovieReviews application **COULD** display the information about its developers within 1 second



THE SYSTEM **SHALL** complete the user authentication within 5 seconds under normal conditions



THE MovieReviews application **SHOULD BE ABLE TO** import FROM  
the world movies system **ALL THE** movies produced in 2024



# Suggested resources

- <https://eafit.sharepoint.com/:b:/s/DepartamentoInformticaySistemas/EX4qhkqeQX5Esdzjx3plhpQBM5mBjvzFMRYi05swxkFFuw?e=YO1XYM>
- [https://eafit.sharepoint.com/:x:/s/DepartamentoInformticaySistemas/EV\\_QpPdlyDRCg2yTrX-NBusBEwqO1GCzwMHwvbmBg3-TTg?e=7vko9d](https://eafit.sharepoint.com/:x:/s/DepartamentoInformticaySistemas/EV_QpPdlyDRCg2yTrX-NBusBEwqO1GCzwMHwvbmBg3-TTg?e=7vko9d)
- [https://eafit.sharepoint.com/:v:/s/DepartamentoInformticaySistemas/EcwAYeg5Z1RKrw1WA1ad2iMB9qwPyRj3ZyESOQQQ3\\_Cn9Nw?e=Yn13c0](https://eafit.sharepoint.com/:v:/s/DepartamentoInformticaySistemas/EcwAYeg5Z1RKrw1WA1ad2iMB9qwPyRj3ZyESOQQQ3_Cn9Nw?e=Yn13c0)

**Thanks!!!!**