

A. Product Requirements

A1. Security Requirements

User authentication must occur before any functionality of the IT ticketing system can be used. Only employees of AAIER have a company-wide username and password (based on what the company has noted in their Active Directory). The username and password will be required for every single session where a user interacts with the system. After consultation with key stakeholders, it was decided that multi-factor authentication was *not* needed during the rollout of this system.

A2. Usability Requirements

A2.1 Navigating critical webpages

Users should be able to access each of the following pages within 2 clicks from the homepage:

- Viewing assigned Tickets / viewing all Tickets
- Editing ticket details (including deleting the ticket)
- Submitting a ticket request

A2.2 Using the ticket request form

The form used to submit a ticket request form must contain a minimal amount of free text inputs. Using drop down menus with a predefined set of inputs instead of free text makes it easier for first time users to recognize what information should be included in each form field. Additionally, dropdown inputs allow for automatic data parsing for the personnel assignment algorithm. The use of drop down menus also standardizes inputs making it easier for IT personnel to find information they may need to process the ticket request.

A3. Dependability Requirements

A3.1 Accurate and easy-to-understand answers to users' questions

Responses provided by the system should be accurate and detailed so that users gain knowledge and insight about the question(s) they have.

A3.2 System errors are quickly resolved and requires little maintenance time so that it is always available to users when they need it

The system should continue to operate and provide basic functionality even when there are software faults so that it is still user accessible. In the backend, the system should detect and handle errors, log detailed error information and provide clear messages to users when they run into problems.

A4. Performance Requirements

A4.1 System should be able to handle both small and large numbers of users

Since there are many actors involved in the help desk system, the system should have the capacity to handle both a small and large amount of users and assistance without crashing. There is such a vague amount of questions, answers, and actors involved that it cannot be static.

A4.2 System response times are dependent on task completion

System carries out requests (ex: ticket creation, ticket assignment, resolution, data storage) within acceptable response times to ensure system performance is optimized for users.