## Functional—what the system will do

- 1.0 The system will display events and their discount codes/coupons. (Primary/Core)
- 1.1 The system will provide users with a ticket purchasing outlet to view and attend events. (Primary/Core)
- 1.1.1. The system should validate eligibility based on user information that's processed. (Secondary)
  - 1.1.1.1 S.N.A.P. number should be entered with whole number values only.
  - 1.1.1.2 User's full name is entered and should contain at most 255 characters (VARCHAR(255)).
  - 1.1.1.3 Zipcode is entered and should be a U.S.P.S. zipcode with exactly five characters (CHAR(5)).
  - 1.1.2 The system should apply appropriate discounts to qualifying users. (Secondary)
- 1.1.3 The system should provide purchase options for additional tickets (i.e., groups). (Secondary)
  - 1.1.3.1 If the group is very large (e.g., a church group), the system should direct the user to the participating sponsor.
- 1.2 The system will grant permission to enter the event by supplying the user with a ticket. (Primary/Core)
- 1.2.1 The system should provide ticket holders a way to save the ticket for offline use. (Secondary)
- 1.3 The website will collect data (e.g., metrics, demographics, location, etc.). (Primary/Core)
- 1.3.1 User data should be aggregated, formatted, and sent to participating organizations. (Secondary)

## Performance—how quickly or how well the system will do it

- 2.0 The website will be reliable and will have a usable front-end user interface. (Primary/Core)
- 2.1 The website will be lightweight (< 1500Kb; average website size is 1996Kb). (Primary/Core)
  - 2.1.1 The website should require users to fill out an online form. (Secondary)
- 2.1.1.1 Users should be able to click on the "submit" button to send their input over the web server.

- 2.1.1.2 The website should save and store information within five minutes.
- 2.1.2 The website should run smoothly on networks prior to 4G or 5G. (Secondary)
- 2.2 The website will be mobile friendly. (Primary/Core)
  - 2.2.1 The system should check how responsive the website is. (Secondary)
    - 2.2.1.1 The system should look into media queries that make the website mobile-first.
      - 2.1.1.1 Media gueries contain the keyword, "min-width."
    - 2.2.1.2 The system should look into viewport settings that make the website scalable across different screen sizes.
      - 2.2.1.2.1 The viewport's width should be equal to the device's width.
      - 2.2.1.2.2 The viewport's height should be equal to the device's height.
      - 2.2.1.2.3 The viewport's initial scale should be 1 or 1.0.
  - 2.2.2 The system should comply with accessibility standards. (Secondary)
    - 2.2.2.1 The system should check for the language the website uses.
      - 2.2.2.1.1 The website's source code contains the line, "<html lang='en'>."
  - 2.2.2.2 The system should check whether the website uses the character-encoding format. UTF-8.
    - 2.2.2.3 The system should check whether the website has a title.
- 2.2.2.4 The system should associate html-element tags with corresponding parts of the website.
  - 2.2.2.4.1 <header> and <footer> tags should be used for the website's header and footer, respectively.
  - 2.2.2.4.2 Block elements (e.g., <main>, <content>, <section>, <div>) should be used for the website's body.
    - 2.2.2.4.3 <aside> tags should be used for side panels, which will help further simplify web navigation.
  - 2.2.2.4.3.1 Side panels should contain icons and images for users to click on.
    - 2.2.2.4.3.1.1 Icons and images should direct users to the appropriate section on the website.

## Business—constraints or policies that must be enforced

- 3.0 The system will allow stakeholders to conveniently access their accounts, and manage their discount offers. (Primary/Core)
- 3.1 The pass must be entered into the system, which uses the output to help determine the discount. (Primary/Core)
  - 3.1.1 Pass should be affiliated with a participating organization.
    - 3.1.1.1 Individual QR codes should be used to validate the pass.
  - 3.1.1.1.1 If the Pass is valid, the user should be directed to a page that confirms the validation and states which discount is applied.
    - 3.1.1.1.2 If the Pass is invalid, the user should receive an error message telling him/her to re-scan.
- 3.2 There needs to be connection to the ticketing system through a Wi-Fi system, accessible kiosks, or a ticketing agent for those who need to purchase a ticket to enter the venue. (Primary/Core)
  - 3.2.1 If a Wi-Fi system is provided, users enter username, password, and for secure connection, the certificate.
  - 3.2.2 If kiosks are available, users should have a self-explanatory onboarding experience.
  - 3.2.3 If a ticket agent is available, users should have convenient access to the agent who confirms the status: "ticket has been successfully purchased."
- 3.3 Participating organizations will have the ability to adjust discounts. (Primary/Core)
  - 3.3.1 Sponsors should be able to log into their accounts, and manage their discount offers.
    - 3.3.1.1 Sponsors fill out a web form that can be accessed through their account.
- 3.3.1.1.1 Submitting the form should update both the database and the website to reflect current discounts.
- 3.4 Participating organizations must be given the ability to opt in/out of the system. (Primary/Core)
- 3.4.1 New sponsors can easily become a partner by getting in touch with the main agency. (Secondary)
  - 3.4.1.1 The website should have a "Contact"/"Contact Us" page with available contact information.
    - 3.4.1.1.1 Each contact's email(s) and any personal website provided should be set as links for readily access.