# User Interface

## General

* Parties must be represented in their respective accepted coulour
* Local results should be accessed from a map
* The UI should be responsive
* The UI must work without JavaScript
* The UI should comply with the W3C accessibility guidelines (http://www.w3.org/standards/webdesign/accessibility)

## Voting

* Voting must include Erststimme and Zweitstimme
* Invalidation of both individually must be possible
* An invalid voting must be clearly indicated
* Upon vote submission the selected votes are displayed and verified once more

## Information

* Current estimates must be accessible
* Estimates must be clearly marked as estimates (i.e. not final results)
* Results for potential coalitions should be selectable
* One must be able to view results of previous elections and their comparison / deltas
* Rate of participation (current and previous) should be displayed
* Gender and age distribution (current and previous elections) should be viewable
* Results per Wahlkreis (current and previous) must be selectable
* Results for individual parties should be searchable (search by party)

# Functional Requirements

## Voting

* Every citizen with the right to vote must not vote more than once per election, entering valid or invalid Erstimme and Zweitstimme
* Citizens must not vote in any other Wahlbezirk than the one they are registered in *x*or by Briefwahl.
* Voting must only work for parties and candidates that are nominated in that year / in that Wahlkreis

## Nominations

* Parties can be nominated once but only once per year
* Parties can hand in exactly one Landesliste per federal state per year
* Candidates can only be listed on exactly one Landesliste per year
* Candidates can only run for a exactly one Wahlkreis per year
* Parties can support only one single candidate per Wahlkreis per year

## Evaluation

* Evaluation of election results follows the current system (Saint Lague)
* (Preliminary) Results are updated in real time as soon as voting occurs
* Results can be accessed both as full dataset as well as delta to timestamp
* A defined interface exists to change the seat distribution method (e.g. from Saint Lague to D’Hondt) **[optional]**

# Non-functional Requirements

* Ease of use
* Privacy
  + Within the database there is no association between citizens and their votes. Within the database no such relation can be derived from other data.
* Reliability and performance
  + **n** million simultaneous voting transactions
  + **n** million simultaneous analysis requests
  + both simultaneous
  + Response time of less than **x**

# Acceptance criteria

* Reproduces correct results of previous elections.
* Fulfils all non-optional functional requirements
* Fulfils performance requirements