

# Vote Service Specification

## Infrastructure

- .Net Web API
- Postgres DB
- Entity Framework ORM
- Service Bus - RabbitMQ
- Identity Provider - KeyCloak

## Nuget Packages

Name	Version used
Aspire.Keycloak.Authentication	9.3.1-preview.1.25305.6
Aspire.Npgsql.EntityFrameworkCore.PostgreSQL	9.3.1
Microsoft.AspNetCore.OpenApi	9.0.7
Microsoft.EntityFrameworkCore.Design	9.0.7
WolverineFx.RabbitMQ	4.7.0

## External (User)

**CastVote** - Adds a new vote to a question or answer. Emits **UserReputationChanged** and **VoteCasted** events

## Queries handled

**GetVotes** - Gets a list of votes for a question. Returns **List of Votes**

## Events emitted

**UserReputationChanged** - When the vote is cast, in response to **Cast vote API endpoint**

**VoteCasted** - When the vote is cast, in response to **Cast vote API endpoint**

## API Endpoints

Method	Route	Purpose	Auth?	Returns
POST	/votes	Create vote	Auth	204 no content
GET	/votes/:questionId	Get votes for question	Auth	200 with <b>Vote[]</b>

## Models

**Vote.cs**

Property Name	Property Type	Default Value	Remarks
Id	string		MaxLength=36
UserId	string		MaxLength=36
TargetId	string		MaxLength=36
QuestionId	string		MaxLength=36
TargetType	string		MaxLength=10
VoteValue	int		
UpdatedAt	DateTime?	DateTime.UtcNow	

## DTOs

CastVoteDto.cs

Property Name	Property Type	Validators
TargetId	string	Required
TargetType	string	Required
TargetUserId	string	Required
QuestionId	string	Required
VoteValue	string	Required

UserVoteResult.cs

Property Name	Property Type	Validators
TargetId	string	Required
TargetType	string	Required
VoteValue	string	Required

Event Emitted Types

UserReputationChanged

Property Name	Property Type
UserId	string
Delta	int
Reason	ReputationReason
ActorUserId	string
Occurred	DateTime

ReputationReason (enum)

QuestionUpvoted
AnswerUpvoted
QuestionDownvoted
AnswerDownvoted
AnswerAccepted

VoteCasted

Property Name	Property Type
TargetId	string
TargetType	string
VoteValue	int