

# 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