

START

|

v

[User Login/Register]

|

└─> [Is User Authenticated?]

|

└─ No → [Redirect to Login Page]

|

└─ Yes

|

v

[Check if User Already Voted]

|

└─ Yes → [Display "Vote Already Cast"]

|

└─ No

|

v

[Display List of Candidates]

|

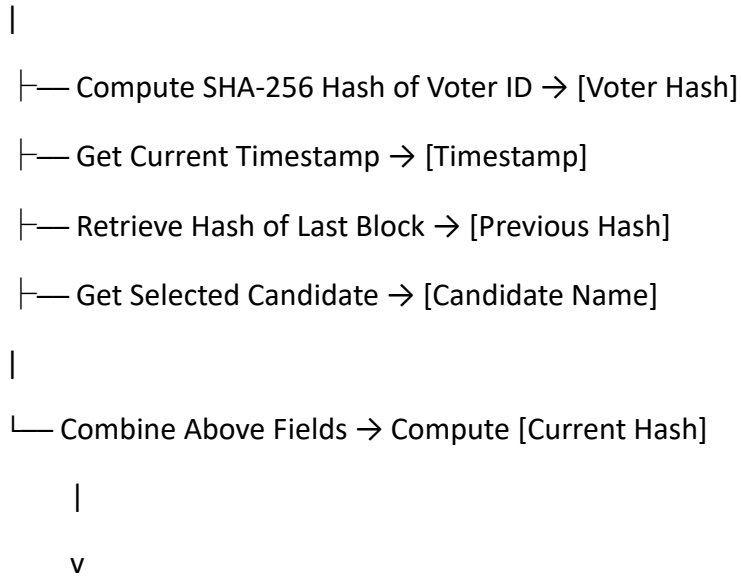
v

[User Selects a Candidate]

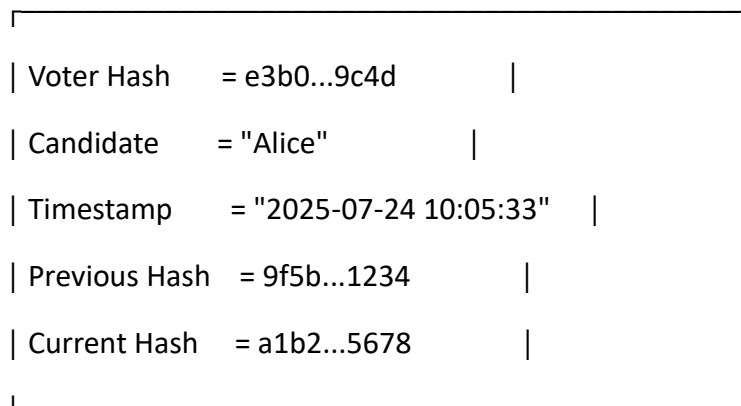
|

v

[Prepare Block for the Vote]



[Create Vote Block]



[Store Block in Blockchain Database]



[Mark User as "Voted" in Database]



[Display Confirmation to User]

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|  
v  
[Redirect to Results Page]  
|  
v  
END
```

User Roles

1. Voter (General User)

- Can register, log in, vote once, and view results

2. Admin

- Can start/stop elections, view live blockchain, export results, and manage the system

List of Required HTML Pages

Here's a complete list of HTML pages, with a description of their **purpose** and **who accesses them**:

Authentication Pages

Page	Filename	Accessed By	Description
Login Page	login.html	Voter & Admin	Login form (email/username + password)
Register Page	register.html	Voter	Registration form for new users
Admin Login Page	admin_login.html	Admin	Separate login page for election admin (optional)

Voting Pages

Page	Filename	Accessed By	Description
Voting Dashboard	vote.html	Voter	Shows list of candidates, allows user to cast vote
Already Voted Notice	already_voted.html	Voter	Displays message if the user has already voted
Vote Confirmation	confirmation.html	Voter	Confirmation screen after successful vote
Results Page	results.html	Voter & Admin	Public view of results and blockchain visualization (read-only)

Admin Control Pages

Page	Filename	Accessed By	Description
Admin Dashboard	admin_dashboard.html	Admin	Admin control panel (start/stop voting, manage candidates)
Blockchain Viewer	blockchain_view.html	Admin	Shows the full blockchain (hashes, timestamps, etc.)
Export Results Page	export_results.html	Admin	Option to download blockchain data as CSV/JSON

Error/Utility Pages (Optional)

Page	Filename	Accessed By	Description
404 Error Page	404.html	All users	If user visits a wrong route
Unauthorized Access Page	unauthorized.html	All users	If a user tries to access admin-only areas

